

Canadian Lung Transplant Working Group

May 13, 2010

Directors,
Canadian Organ Procurement Organizations

RE: Algorithm for offering donor lungs in Canada

Dear Directors:

The directors of the five Canadian Lung transplant programs have been working along with Canadian Blood Services to develop mechanisms of ensuring maximal utilization of donor lungs in Canada.

We recognize that the decision to utilize donor lungs depends on a number of factors including the quality of donor lungs, the characteristics of the recipient, and other factors including distance, logistics, etc. We also recognize that with experience, the definition of suitable donor organs is expanding to include donors who have not previously been considered.

New techniques are also coming in to play including the potential for ex-vivo reconditioning of lungs as demonstrated by the Toronto Lung Transplant Program.

After considerable discussion, the directors of the lung transplant programs in Canada would like to institute a new algorithm for offering donor lungs for transplantation. Again, our goal is to ensure that there is maximum utilization of all potential donor lungs in Canada.

We are proposing the following algorithm which we hope that your organ procurement group will find acceptable. This includes:

1. All lungs should be offered no matter what condition they are in. This is to ensure that programs that may have a suitable high risk recipient will have the potential to access these lungs, and also ensures that lungs will be made available for potential ex-vivo reconditioning.
2. These lungs should be offered sequentially beginning with the local program to whom donors are usually referred, and then moving on to each of the other four programs sequentially based on geographic distance.

Should the local program not be able to use the donor lungs, they should be offered in sequential fashion to the next geographically closest programs as per the following algorithm.

- a. Donor in BC Transplant region offered sequentially to Vancouver, Edmonton, Winnipeg, Toronto, Montreal.
- b. Donor in Edmonton region offered sequentially to Edmonton, Vancouver, Winnipeg, Toronto, Montreal.
- c. Donor in Winnipeg region offered sequentially to Winnipeg, Edmonton, Toronto, Montreal, Vancouver.
- d. Donor in Toronto region offered sequentially to Toronto, Montreal, Winnipeg, Edmonton, Vancouver.
- e. Donor in Montreal region offered sequentially to Montreal, Toronto, Winnipeg, Edmonton, Vancouver.

February 12, 2010

RE: Algorithm for offering donor lungs

The Canadian Lung Transplant Group recognizes that this may create an increased amount of work for organ procurement groups. However the potential benefit is in possible increased utilization of donor lungs. We also recognize that some donor offers will pass through all five programs without being utilized.

Our commitment as recipient programs is to endeavour to respond as quickly as possible so as not to hold up the allocation process. The expectation is that recipient programs will make every attempt to respond within 30 minutes with an accept or decline response unless mitigating circumstances are present.

In order to most efficiently process offers, the basic minimum information needed for recipient programs to determine acceptability is documented in appendix 1. Ideally this information should have been obtained or updated within the previous 12 hours.

Finally, in order to determine if this is a useful protocol that results in increased utilization, there is a need to track outcomes. Your input on how to accomplish this is vital. In our discussions with Canadian Blood Services, it appears that this information will be able to be tracked electronically as early as July 2010. We will endeavour to keep the organ procurement groups updated on the success of this undertaking.

Thank you again for your assistance. The five lung transplant programs in Canada are committed to improving donor lung utilization to the benefit of all Canadians.

Yours truly,

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Appendix 1

Lung Donor Data Worksheet

Basic Information:

Donor Program:

Donor Identification Number:

Date:

ABO blood type:

Organs:

Right Single Lung: ____ Left Single Lung: ____

Double Lung: ____ Heart-Lung: ____

Height:

Weight:

Chest Circumference:

Estimated Total Lung Capacity:

Medical History:

Social History:

Smoking history:

Illicit drug Use:

Chest X-ray (within 12 hours of offer):

Arterial blood gases (within 12 hours of offer):

FiO2 ____ PaO2____ PaCO2____ pH____

Bronchoscopy results (if available):

Hepatitis B serology:

Hepatitis C serology:

Additional Information if available:

CT Chest:

CMV serology:

Other serology:

HLA typing: