



## Canadian Respiratory Conference 2021

[CONTINUE](#)

### Submission ID

38

### Title

Exacerbation Frequency and Quality of Life in Canadians with Alpha-1 Antitrypsin Deficiency: Effect of Augmentation Therapy

### Policies

- I have reviewed and understand the policies of submitting an abstract for the CRC 2021. To review the policies and guidelines, visit the CRC 2021 website at <https://cts-sct.ca/crc/> and follow the link and information listed under Poster Abstracts. Direct link to policy and guidelines: <https://cts-sct.ca/wp-content/uploads/2020/09/CRC-2021-Abstracts-Policy-and-Guidelines-EN-Final.pdf>

### Publishing

- By submitting an abstract, I understand that all accepted abstracts will be published on the CRC 2021 virtual event platform/CRC website and in the CRC Conference Supplement, and in the Canadian Journal of Respiratory, Critical Care, and Sleep Medicine.

## Abstract type

- Research/program poster
- Case report

## Abstract

**Rationale:** Augmentation therapy with intravenous plasma-derived alpha-1 antitrypsin protein (AUG) is available to some Canadians with lung disease due to alpha-1 antitrypsin deficiency (AATD). AlphaNet Canada (ANC) follows individuals with AATD using monthly telephone contact by trained coordinators who also collect health-related and quality of life (QOL) data. We assessed the frequency and severity of exacerbations as well as QOL in ANC participants able to receive AUG compared to those who were not.

**Methods:** Prolastin<sup>®</sup>-C (Grifols Canada Ltd.), the only currently available Canadian AUG product, is distributed through Innomar Strategies. Demographic data from Innomar were combined with exacerbation data, SF-36 and Saint George's Respiratory Questionnaire (SGRQ) scores from ANC for patients with AATD who were prescribed AUG, some of whom were able to receive AUG (n=285) while others were not (n=134). Various definitions of exacerbations and their severity were applied to these data and subjects who were followed for at least two years were included in the analyses.

**Results:** At baseline, the demographics of those on or off AUG was statistically similar with exceptions that those receiving AUG were more likely to be employed, be current non-smokers, have more frequent healthcare provider visits, and have a severely deficient genotype. Provinces of residence were also different. SF-36 and SGRQ scores were similar between groups at baseline but there was improvement in some subgroups receiving AUG. Exacerbations were more frequent in the AUG group at baseline and there was a substantial reduction in the exacerbation rate at year1 in both groups that was relatively sustained in year2. Those receiving AUG showed a reduction in severe exacerbations between year1 and year2.

**Discussion:** This pilot study suggested some improvements in exacerbation severity and SGRQ in the group receiving AUG compared to similar subjects not receiving AUG. The provincial differences may reflect availability of AUG reimbursement. This study is limited by the small sample size and limited duration of follow-up. ANC will continue to follow these subjects over the coming years.

**Conclusion:** Augmentation therapy may slow QOL decline and reduce the severity of exacerbations in those with AATD compared to those not receiving AUG.

## Authors and Affiliations

*Robert Sandhaus (Presenting)*

AlphaNet Canada, Toronto, Ontario, Canada  
National Jewish Health, Denver, Colorado, USA

*Kristen Holm*

National Jewish Health, Denver, Colorado, USA

*Belinda Yap*

Innomar Strategies, Inc., Oakville, Ontario, Canada

## Presenting Author

1-720-840-1016

Please provide Presenting Author's email address

rsandhaus@alphanet.org

## Author will attend

I confirm that the presenting author will register in full to attend the Conference and present the poster.

## Categories

Clinical Research

## Topic

COPD

## Conflict details

Medical Director, AlphaNet Canada; Medical Advisor to Grifols USA.

## Poster Awards