# 

Canadian Journal of Emergency Medicine/Journal canadien de la médecine d'urgence

Volume 22 Supplement 2

September 2020/septembre 2020

The Canadian Transport Medicine Association (CTMA)
Supplement in Prehospital and Transport Medicine
Guest Editors: Homer Tien and Russell MacDonald



Inspiring excellence in emergency medical care





# Canadian Journal of Emergency Medicine Editorial Board

#### **Editor-in-Chief**

Ian G. Stiell, MD, MSc University of Ottawa, Canada

## **Deputy Editors**

Paul Atkinson, MB, BCh, BAO, MA Dalhousie University, Canada

Eddy Lang, MD, CM University of Calgary, Canada

## **Managing Editor**

Jennifer Brinkhurst, BAH Ottawa, Canada

### **Assistant Managing Editor**

Jacqueline Fraser, RNBN Saint John, Canada

#### **Social Media Editor**

Hans Rosenberg, MD University of Ottawa, Canada

#### **Associate Social Media Editor**

Simon Huang, MD, MSc Dalhousie University, Canada

#### **Editor Emeritus**

James Ducharme, MD McMaster University, Canada

Grant Innes, MD University of Calgary, Canada

#### **Decision Editors**

David Barbic, MD, MSc

University of British Columbia, Canada

Simon Berthelot, MD, MSc *Université Laval, Canada* 

Peter Alistair Cameron, MBBS, MD

The Alfred Hospital and Monash University, Australia

Alix Carter, MD, MPH Dalhousie University, Canada

Kerstin de Wit, MBChB, MSc, MD McMaster University, Canada

Quynh Doan, MDCM, MHSc, PhD University of British Columbia, Canada

Robert S. Green, MD

Dalhousie University, Canada

Andrew K. Hall MD, MMEd Queen's University, Canada

David Lewis, MBBS

Dalhousie University, Canada

Kirk Magee, MD, MSc Dalhousie University, Canada

Patrick McLane, PhD

Alberta Health Services, University of Alberta, Canada

Andrew McRae, MD, PhD University of Calgary, Canada

Shawn Mondoux, MSc, MD McMaster University, Canada

Catherine Patocka, MDCM, MHPE University of Calgary, Canada

Andrew Petrosoniak, MD, MSc (MedEd)

University of Toronto, Canada

Naveen Poonai, MD, MSc Western University, Canada

Brian Steinhart, MD

University of Toronto, Canada

Daniel K. Ting, MD

University of British Columbia, Canada

Rob Woods, MD, MMEd

University of Saskatchewan, Canada

Peter J. Zed, PharmD

University of British Columbia, Canada

#### **Associate Editors**

Teresa Chan, MD

McMaster University, Canada

Garth Dickinson, MD

University of Ottawa, Canada

Marcel Émond, MD, MSc Université Laval, Canada

Jeff Eppler, MD

Kelowna General Hospital, University of British Columbia, Canada

Mete Erdogan, PhD, MHI Dalhousie University, Canada

Ran Goldman, MD

University of British Columbia, Canada

Sophie Gosselin, MD McGill University, Canada

Niranjan Kissoon, MD

University of British Columbia, Canada

Laurie J. Morrison, MD, MSc University of Toronto, Canada Heather Murray, MD, MSc

Heather Murray, MD, MSc Queen's University, Canada

Jeffrey Perry, MD, MSc University of Ottawa, Canada

Roy Purssell, MD

University of British Columbia, Canada

Michael J. Schull, MD, MSc University of Toronto, Canada

John M. Tallon, MD, MSc

University of British Columbia, Dalhousie University, Canada

Suneel Upadhye, MD McMaster University, Canada



Vol. 22, No. S2 September 2020/septembre 2020

# cjem-online.ca

This supplement was funded by Ornge.

The papers included in this supplement were invited by the Guest Editors, Dr. Homer Tien and Dr. Russell MacDonald, and have undergone the standard journal formal review process. They may be cited. The Guest Editors declare no conflict of interest.

# Table of Contents • Table des matières

#### **ORNGE SUPPLEMENT**

- S1 Canadian Transport Medicine: Waypoints and Destinations D. Gregory Powell, Andrew L. McCallum
- S4 Cryoprecipitate transfusion in bleeding patients

  Barto Nascimento, Jerrold H. Levy, Homer Tien, Luis Teodoro Da Luz
- S12 Pre-hospital hypothermia is associated with transfusion risk after traumatic injury
  Naheed K. Jivraj, Lilia Kaustov, Kennedy Ning Hao, Rachel Strauss,
  Jeannie Callum, Homer Tien, Asim Q. Alam
- S21 Clinical handover from emergency medical services to the trauma team:
  A gap analysis
  Arshia P. Javidan, Avery B. Nathens, Homer Tien, Luis T. da Luz
- S30 Identifying causes of delay in interfacility transfer of patients by air ambulance Alanna Wong, Aidan McParland, Brodie Nolan
- S38 Can a screening tool safely identify low risk cardiac patients to be transported with primary care flight paramedics?

  Justin Godbout, Sean W. Moore, Bruce Sawadsky, Andy Pan,
  Christian Vaillancourt
- S45 Factors associated with non-optimal resource utilization of air ambulance for interfacility transfer of injured patients

  Andrew Quirion, Mahvareh Ahghari, Brodie Nolan
- S55 Air medical transport myths
  Russell D. MacDonald, Michael Lewell, Sean Moore, Andy Pan,
  Michael Peddle, Bruce Sawadsky
- S62 Abdominal ultrasound image acquisition and interpretation by novice practitioners after minimal training on a simulated patient model Bradley Waterman, Kristine Van Aarsen, Michael Lewell, Homer Tien, Frank Myslik, Michael Peddle, Sean Doran
- S67 Blood product transfusion during air medical transport: A needs assessment
  Russell D. MacDonald, Aliya Ramjaun





Quality of abdominal ultrasound image acquisition by novice practitioners following a minimal training session on healthy volunteers
 *Bradley Waterman, Kristine Van Aarsen, Michael Lewell, Frank Myslik, Michael Peddle, Sean Doran* Hazard control for communicable disease transport at Ornge
 *Michael B. Peddle, Justin A. Smith* Critical care transport in the time of COVID-19
 *Homer Tien, Bruce Sawadsky, Michael Lewell, Michael Peddle, Wade Durham* Primary aeromedical retrieval crew composition: Do different teams impact clinical outcomes?
 A descriptive systematic review
 *Colin Laverty, Homer Tien, Andrew Beckett, Avery Nathens, JP Rivest-Caissy, Luis Teodoro da Luz* Implementing a 2019 coronavirus disease airway management strategy for a provincial critical care and ground transport program
 *Scott MacDonald, George Kovacs, Tobias Witter, Yves Leroux, Steven Crocker, Lindsay Richards*