

questionnaire incorporated into a software program developed specifically for the study.

**Results:** From 2013 to 2017, 433 patients requiring EMS due to an anaphylactic reaction were recruited, of which 42.6% were male, with a median age of 40.7 years (interquartile range [IQR]: 20.1, 59.0). The percentage of anaphylaxis among all ambulance calls did not change significantly [0.06% (95%CI – 0.02%, 0.15%)] over this time interval. Among patients with anaphylaxis, 37.4% presented with a food allergen trigger. Among food allergens, the most common trigger was peanut (19.8%). Around 20% of anaphylactic reactions were reported to be triggered by drug (17.6% of which were triggered by moxifloxacin), and similarly 20.1% were caused by venom. Approximately 15% of anaphylactic reactions were caused by an unknown exposure. Prior to EMS arrival, only 33.7% patients were administered epinephrine, compared to 35.6% who were administered antihistamines. Prior to EMS arrival, 2.7% of patients were administered steroids. Almost 60% were administered epinephrine by the paramedics, 0.4% were administered antihistamines and none were administered steroids. One-fifth (20.8%) of patients were administered epinephrine both before and after EMS arrival.

**Conclusion:** Epinephrine administration by patients prior to EMS arrival occurs in less than half of the cases of anaphylaxis in rural settings of Quebec.

#### #55

##### Improvement in disease-specific quality of life for peanut-allergic subjects continuing AR101 therapeutic dosing for an additional 28 weeks

Jason Ohayon<sup>1</sup>, Gordon Sussman<sup>2</sup>, Moshe Ben-Shoshan<sup>3</sup>, Amarjit Cheema<sup>4</sup>, William H. Yang<sup>5</sup>, Noelle M. Griffin<sup>6</sup>, Deborah Cebrik<sup>6</sup>, Andrea Vereda<sup>7</sup>, Jonathan Hourihane<sup>8</sup>, on behalf of the investigators

<sup>1</sup>Hamilton Allergy, Hamilton, Canada; <sup>2</sup>Gordon Sussman Clinical Research, Toronto, Canada; <sup>3</sup>McGill University Health Center, Montreal, Canada;

<sup>4</sup>Cheema Research, Mississauga, Canada; <sup>5</sup>Ottawa Allergy Research Corporation, University of Ottawa Medical School, Ottawa, Canada; <sup>6</sup>Aimmune Therapeutics, Brisbane, CA, USA; <sup>7</sup>Aimmune Therapeutics, London, UK; <sup>8</sup>University College Cork, Cork, Ireland

**Correspondence:** Jason Ohayon

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**Background:** Peanut allergy is associated with poor health-related quality of life (QoL). PALISADE was a phase 3 double-blind, placebo-controlled trial that investigated the safety and efficacy of AR101, an investigational oral biologic drug for use in oral immunotherapy in peanut-allergy subjects. A subgroup of subjects continued the therapeutic dose of AR101 (300 mg/day) in an open-label follow-on study (ARC004) for 28 weeks. Here we report on the changes in QoL in these subjects.

**Methods:** Subjects 8–17-years-old (self-report) and parents/caregivers of subjects 4–17-years-old (proxy-report) completed an age-appropriate Food Allergy Quality of Life Questionnaire (FAQLQ) and Food Allergy Independent Measure (FAIM) at PALISADE screening, exit and at ARC004 exit. Total and domain scores were calculated for all time points for the overall population and stratified by responder status, systemic allergic reactions, or adrenaline use during the study period. Changes in scores (screening to exit) were calculated to determine if they exceeded the developer-referenced minimally important difference (MID)  $\geq 0.5$ .

**Results:** 110 PALISADE subjects 4–17-years-old received 300 mg/day AR101 in ARC004; 68 subjects and 93 parents/caregivers completed FAQLQ and FAIM. Self-reported QoL from screening to exit in total scores for FAQLQ and FAIM improved and exceeded the MID (FAQLQ: PALISADE 4.48 vs. ARC004 3.77; FAIM: PALISADE 3.70 vs. ARC004 3.10). Proxy-reported QoL from screening to exit improved but did not exceed the MID (FAQLQ: PALISADE 4.08 vs. ARC004 3.74; FAIM: PALISADE 3.81 vs. 3.40). Changes in self- and proxy-reported QoL scores were similar regardless of responder status, systemic allergic reactions, or epinephrine use.

**Conclusions:** AR101-treated subjects continuing the therapeutic dose (300 mg/day) for an additional 28 weeks reported improved FAQLQ

and FAIM scores. Gradual improvements over time may reflect the need for adjustment to their desensitization status. This report supplies the first evidence in a blinded trial of positive changes in QoL for subjects with food allergy.

#### #56

##### Perceived parental mental health impact of food allergy

Elissa M. Abrams<sup>1,2,3,4</sup>, Leslie Roos<sup>5</sup>, Elinor Simons<sup>1,6</sup>, Kim Hurst<sup>2,7</sup>, Jennifer L.P. Protudjer<sup>1,2,8,9,10</sup>

<sup>1</sup>Department of Medicine, University of Manitoba, Winnipeg, MB, Canada;

<sup>2</sup>Children's Hospital Research Institute of Manitoba, Winnipeg, MB,

Canada; <sup>3</sup>Meadowood Medical Centre, Winnipeg, Canada; <sup>4</sup>Department

of Pediatrics, Division of Allergy and Immunology, University of British

Columbia, Vancouver, BC, Canada; <sup>5</sup>Department of Psychology, University

of Manitoba, Winnipeg, Winnipeg, MB, Canada; <sup>6</sup>Department of Pediatrics,

Section of Allergy and Clinical Immunology, University of Manitoba, Win-

nipeg, MB, Canada; <sup>7</sup>Department of Health Sciences, Queen's University,

Kingston, ON, Canada; <sup>8</sup>George and Fay Yee Centre for Healthcare Innova-

tion, Winnipeg, MB, Canada; <sup>9</sup>Department of Food and Human Nutritional

Sciences, University of Manitoba, Winnipeg, MB, Canada; <sup>10</sup>Institute

of Environmental Medicine, Karolinska Institutet, Stockholm, Sweden

**Correspondence:** Jennifer L.P. Protudjer

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**Background:** Approximately 8% of children have food allergies, which impacts family life. Yet, parents' coping strategies for this disease burden are incompletely understood. We aimed to describe the perceptions of allergy-related mental health issues in families with food allergy.

**Methods:** This is an ongoing qualitative interview study of parents of children with paediatric allergist-diagnosed food allergy, who were recruited in allergy clinics and education centres in Winnipeg. Interviews were transcribed verbatim. We used content analysis from which we identified preliminary overarching themes. The University of Manitoba Health Research Ethics Board approved this study (HS22242 (H2018-408)).

**Results:** To date, we have interviewed 13 mothers, with children aged <12 months to 13 years. Perceived mental health impacts varied by type and number of food allergies, and time lapse since diagnosis. For parents whose children had a single food allergy, "**Accommodation and Adaptation**" was described, whereas most parents of children with multiple food allergies reported negative impacts on their mental health.

As captured in the theme, "**Pragmatism and Isolation**", many spoke of being "**depressed**" and "**terrified**" about leaving their children in the care of others who were perceived as being only minimally equipped to handle food allergy. Parents felt "**overwhelmed and alone**," and engaged in negative ways of coping. For parents who lacked support from their extended family and/or daycare/school, this impact was particularly strong. Time lapse since diagnosis also impacted perceived mental health. "**Fear for today, fear for the future**" was commonly described by parents whose children were recently diagnosed, whereas the theme, "**Food allergy management has become our normal**" was identified amongst parents whose children had been living with the condition for some time.

**Conclusion:** Food allergy has varying impacts on parental mental health. Most negatively affected are those whose children have multiple food allergies, and/or who have recently been diagnosed.

#### #57

##### Dairy intake amongst Manitoba adolescents with and without food allergy by Jennifer Protudjer

Jennifer L.P. Protudjer<sup>1,2,3,4,5</sup>, Anita L. Kozyrskij<sup>6</sup>, Allan B. Becker<sup>1,2</sup>

<sup>1</sup>Department of Pediatrics and Child Health, University of Manitoba,

Winnipeg, MB, Canada; <sup>2</sup>Children's Hospital Research Institute of Mani-

toba, Winnipeg, MB, Canada; <sup>3</sup>George and Fay Yee Centre for Healthcare

Innovation, Winnipeg, MB, Canada; <sup>4</sup>Department of Food and Human

Nutritional Sciences, University of Manitoba, Winnipeg, MB, Canada;

<sup>5</sup>Institute of Environmental Medicine, Karolinska Institutet, Stockholm,

Sweden; <sup>6</sup>Department of Pediatrics, University of Alberta, Edmonton, AB,

Canada

**Correspondence:** Jennifer L. P. Protudjer

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