## **Predictors of Celiac Disease in Patients with Type 1 Diabetes and Positive Tissue Transglutaminase IgA**

Andrew Krueger, MD; Jessica Rutsky, MD; Qin Sun, MPH; Lin Fei, PhD, MS; Daniel Mallon, MD, MSHPEd.

• Screening for celiac disease in patients with type 1 diabetes (T1DM) with tissue transglutaminase immunoglobulin A (TTG IgA) commonly yields false positive abnormal results

Screening for celiac disease with endomysial antibody



Gender



Race/Ethnicity



BMI



Age

## <u>Conclusions</u>: In pediatric patients with T1DM, the degree of TTG IgA elevation and EMA dilution were predictive of celiac disease diagnosis, whereas presenting symptoms, anthropometric data, and additional labs were not found to be predictive.

## What clinical and serological features more accurately predict celiac disease in pediatric patients with T1DM?

(EMA) is highly specific in general populations, but there is limited data on this screening test in patients with T1DM



Symptoms



Not associated with celiac disease diagnosis

Methods: Retrospective chart review of 123 endoscopies performed from 2016-2022 to evaluate for celiac disease in 116 unique patients from a 2179 member single center Type 1 Diabetes registry



TTG IgA

Every 10-fold TTG IgA increase

4.7x increased risk of CD





**EMA** 

Endomysial Antibody PPV = 0.78