

Comparison of Allergic Reactions From In-Office versus Out-of-Office Updosing during Pediatric Oral Immunotherapy

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Rationale: Oral immunotherapy (OIT) is a desensitization method for patients with IgE-mediated food allergy. Frequent in-person visits for dose escalation (“updoses”) create time, geographic, and financial barriers that may limit access to treatment. We sought to explore the safety of out-of-office updosing (virtual or semiautonomous) as a strategy to reduce these barriers and expand OIT access.

Methods: We conducted a retrospective chart review of patients with IgE-mediated food allergy who initiated OIT at our practice between December 2021 and July 2026. Demographics, number of updoses, and updose location were collected. Reactions and epinephrine administration were recorded. Overall in- and out-of-office reaction and epinephrine administration rates were compared using Fisher’s exact test.

Results: Thirty-nine patients (23 males) underwent at least one updose during the study period. The mean (SD) age at OIT initiation was 34.7 (19.5) months. Of 494 updoses, 321 (65.0%) occurred in-office and 173 (35.0%) occurred out-of-office. Reactions occurred following 3/321 (0.93%) in-office updoses and 2/173 (1.16%) out-of-office updoses ($p=1.000$). Epinephrine was administered following 3/321 (0.93%) in-office and 1/173 (0.58%) out-of-office updoses ($p=1.000$).

Conclusions: There was no significant difference in the overall reaction rates or epinephrine administration rates between in-office and out-of-office updoses. This limited dataset suggests that out-of-office updosing may be a safe alternative to in-office updosing for appropriately selected patients, potentially reducing barriers to treatment, expanding access, and making OIT a viable option for more patients.

Old

Questions:

- Which patients are we using—all, just maintenance, just not those who left?
 - Start with everybody, then exclude from question
 - Starting n =
 -
- Go through and record rxn history of online vs no virtual
 - Confounder of less likely virtual if more worried about risk>
 - Distinction between if they ever reacted to updose on virtual vs in person
 - Should we look at overall rxns that were in person vs virtual or by kid?
- Reactive airway or not!
- Number of reactions → WAO grade, symptoms, epi, ed, hospitalized, treatment stopped?
 - Was it virtual updose, in-person, home dose after updose, maintenance/home dosing
- Number of in person vs number virtual?? Lowest priority and not sure we can get entirely accurate
- "Should our primary analysis compare **patients who ever underwent virtual up dosing versus those who never did**, or should we compare **virtual updose encounters versus in-person updose encounters**?"
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Question: is virtual up dosing associated with similar safety profile compared with traditional in-person up dosing

- Primary comparison = virtual updose EVER vs NEVER
- Any adverse rxn ever? Or just WAO>=3? Epi use? GI? What

Analysis

Restart project: 8/20/26

- Do we want to do all current pts? Even those who have only had maybe one updose (charlotte ex)
- Remote dosing (thought that was the aim)
- So what exactly do we want to do with the data. What do we want to include prelim
- Do we want to go through and do reactive airways? Can be issue for another time/not in abstract
- Update on baby steps?
 - Clinical research person from tulane helping. Setting up to get funding and such. Agreement so I can be on it

- Doing virtual visits is not less safe. Thinks 30-60 mins we could run through
- Think no clinical significance in dosing home vs in person
- Do just OIT and she will say whether reacted or not (SLIT is all SA no)
- Calculate duration been on therapy to use as proximate days on therapy.
#updoses in office vs # updoses virtually. Number of rxns
 - Find total updoses (should pretty standard) and number of virtual and number of in office updoses)
- Expect at-home updosing to be as safe and effective as in office/ caveat with selecting proper patient

Questions

- Avery Baker gap between oct 2023 to april 2024
- How do we categorize a restart??
- How many updoses did Calder do (if any)
- Do we count a SLIT/OIT bridge day as an updose?
- How do we want to count the semiautonomous patient updoses? Do we have reports from each updose/are we working backwards? (Thomas B, Kumars, Vivien W)
- Confirm Gabe never updosed
- Was Gracie's rxn July 30, 2026 with a note of BM and runny nose? Epi?
- Benjy M gap between box at .25mL 2/21/24 to Jane home dose .6mL 5/1/24
- Augie M exact box updoses
- Wesley M two start dates and duplicated chart entry—is second updose?
- I am extrapolating at least one Farris R dose between box Nov 13, 2023 (0.4mL egg, 1/64 1:1 pb) to Jane Apr 24, 2024 home dosing (.8mL diluted egg, 1/64 pb)
- Michael S need box data—drive has box notes I cannot open; ~1 year gap between last dated updose in drive and first in jane
- Did Wesley Y ever actually updose?