

Measuring What We Do

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Why Collect the Data You Generate

- Practice promotion
- Inform prospective OIT families
- Improve patient care
- Contribute to the improvement of OIT

Data Collection at Dallas Food Allergy Center

Patient Reference#	First Name	Last Name	Food Type	OIT Status	Pre OIT Total IgE	Pre OIT Total IgE Date	Pre OIT AEC	Pre OIT AEC Date
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Pre OIT sIgE Results	Pre OIT sIgE Date	Pre OIT sIgE Lab	Pre OIT Peanut Ara H1	Pre OIT Peanut Ara H2	Pre OIT Peanut Ara H3
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Pre OIT Peanut Ara H8	Pre OIT Peanut Ara H9	Pre OIT Peanut Component Test Date	Pre OIT SPT FOOD (1)mm	Pre Histamine
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74 Data Elements per Patient

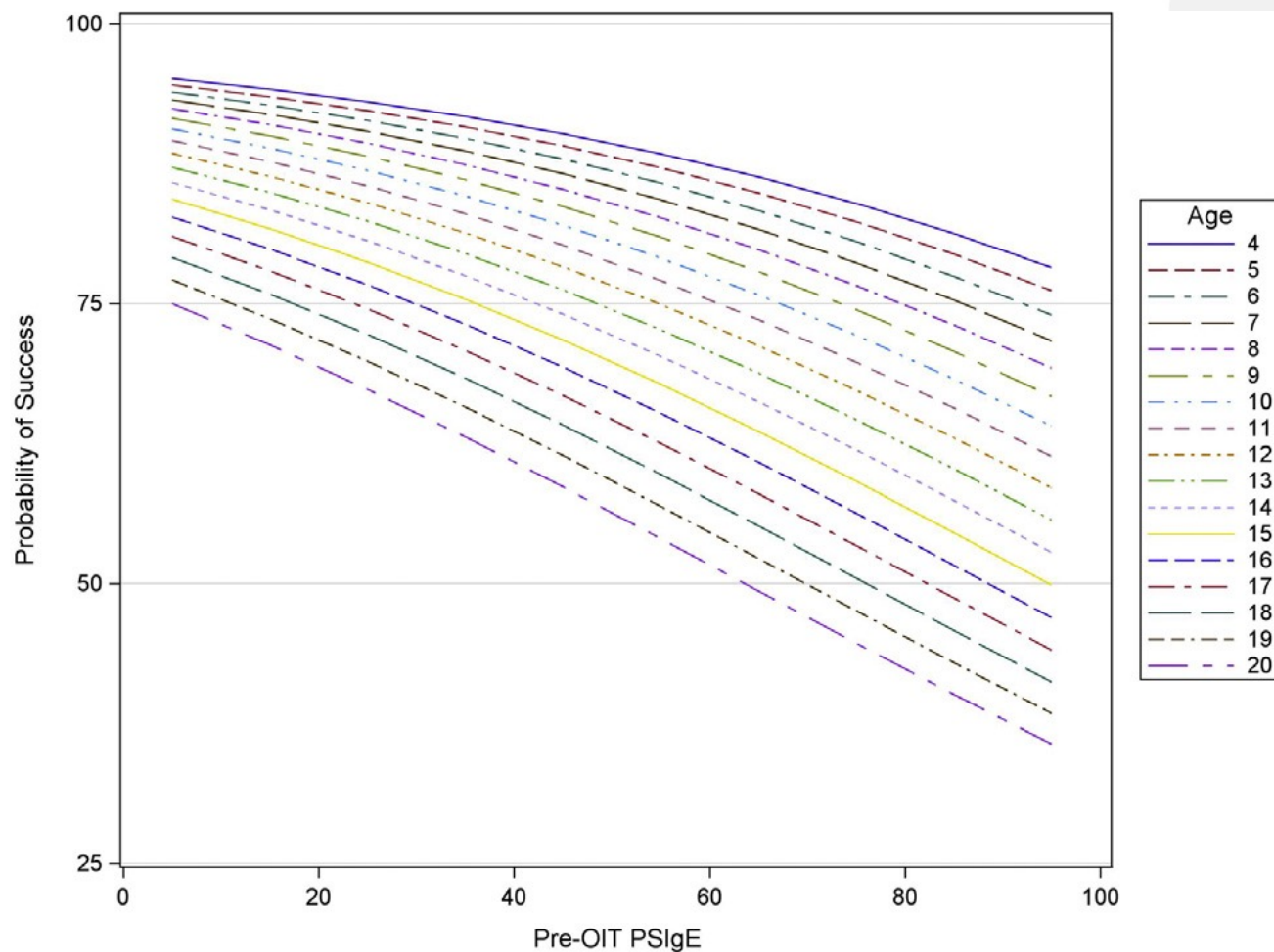
Observations – JACI:IP, 2014

- Five OIT centers from two countries using several different protocols
- OIT success rate 80%
- Epinephrine treated reaction rate during escalation 2/1000 doses
- Epinephrine treated reaction rate during maintenance 1/10,000 doses

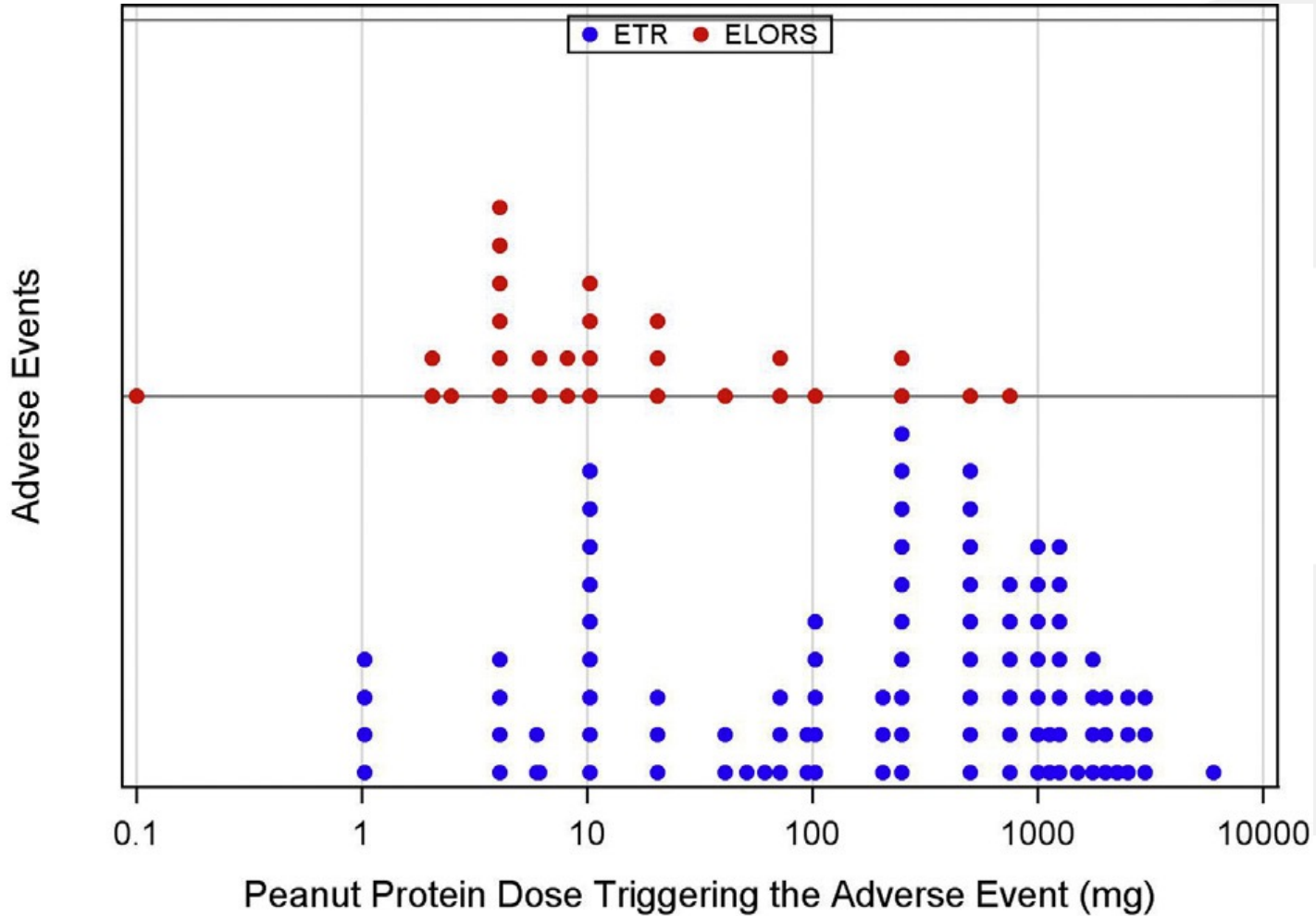
Observations – JACI:IP, 2018

- Asthma was not significantly associated with peanut OIT success
 - Intermittent asthma was not statistically associated with OIT failure $p=0.6$
- Each year peanut OIT is delayed decreases the likelihood of success by 17%
- The risk of epinephrine treated reactions increases with increasing sIgE
- The risk of ELORS increases with increasing sIgE

Probability of Reaching the Escalation Target Based on Age and sIgE



Doses Triggering ELORS and ETRs



Observations – Annals, 2021

- >90% of cashew OIT patients pass a pistachio challenge
- >95% of walnut OIT patients pass a pecan challenge

Current Observations – Work in Progress

- The frequency of ELORS is too high
- Atopy and ELORS
 - History of eczema $p < 0.001$
 - History of allergic rhinitis $p = 0.51$
 - History of asthma $p = 0.99$
- Atopy and the need for epinephrine
 - History of eczema $p < 0.095$
 - History of allergic rhinitis $p = 0.84$
 - History of asthma $p = 0.058$
- Neither history or lab (other than sIgE) predict success
- Vitamin D insufficiency and deficiency are common among OIT patients

Data Collection Methods

- Extraction from the EMR
 - Easiest approach to data collection
 - Most cost effective data collection
 - Data of interest must be entered as discrete elements
- Contemporaneous data entry into a database or spreadsheet
 - Requires double entry
 - Reliably captures all the data
- Retrospective data entry into a database or spreadsheet
 - Costly
 - May miss some patients or data

Legal/Ethical Considerations

- Include a sentence or two about data collection in your OIT consent
- Data collection for internal use (CQI) requires no IRB review or approval
- If you want to report your data
 - IRB approval is required
 - Data collection is neither prospective nor interventional
 - Exempt Research
 - Collaborate with a local A/I training program

Measure What You Do

When you collect and review your experience,
you improve

Your practice

Your patient care

The practice of OIT Allergy