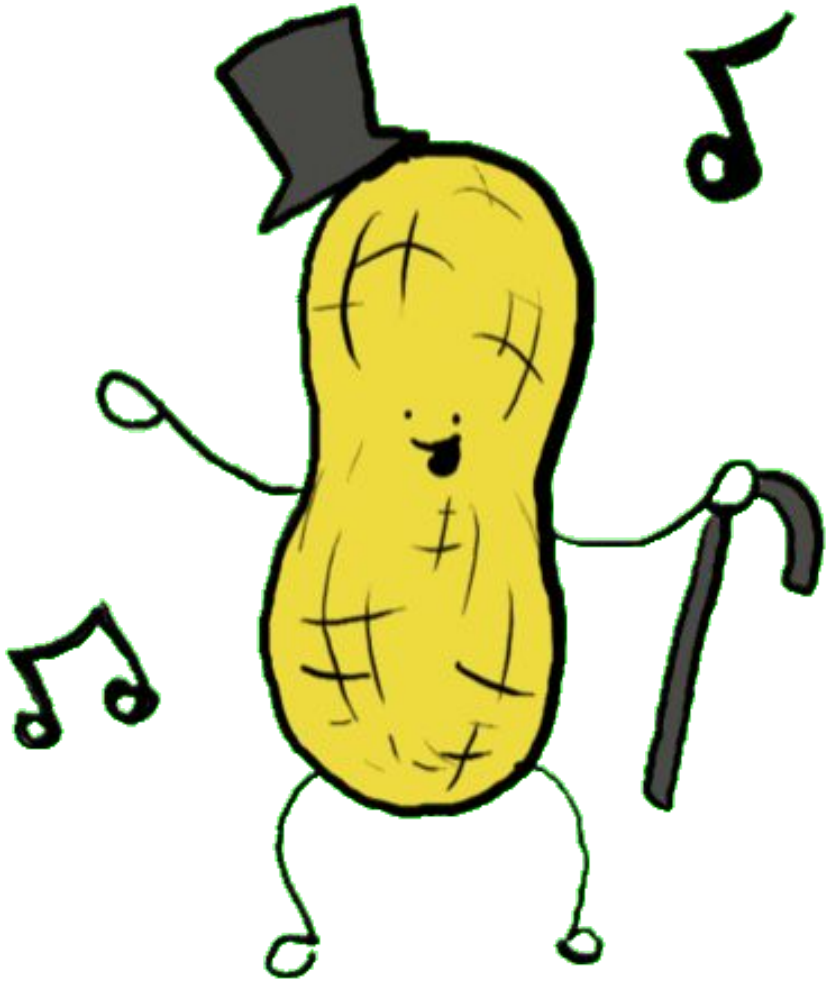
TREATING PEANUT ALLERGY WITH SLIT



CONTENT

Background
- ✔ General information about peanut allergy
- ✔ What is SLIT?

Challenge
- ✔ Extended course of SLIT after 1-year SLIT

Solution
- ✔ 1-year SLIT
- ✔ 5-year SLIT
- ✔ Final assessment DBPCFC

Results
- ✔ DBPCFC results
- ✔ Side effects of SLIT

Evaluation

Q&A

The percentage of children with peanut allergies is

3%

in Western countries

(Du Toit et al., 2015).

PEANUT ALLERGY IS THE LEADING CAUSE OF ANAPHYLAXIS AND DEATH DUE TO FOOD ALLERGY

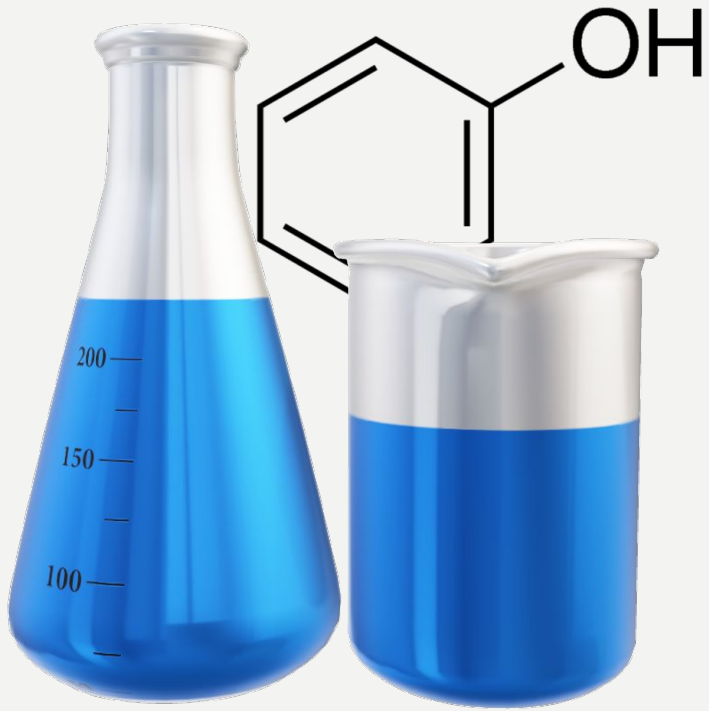
(DU TOIT ET AL., 2015).

SUBLINGUAL IMMUNOTHERAPY

Repeated procedure of absorption of increasing allergen doses underneath the tongue to build the immune system's tolerance to the allergen extract (Orgel et al., 2018).

SUBLINGUAL DROPS

consisted of **peanut extract** fully dissolved in



0.2% phenol and 50%-55% glycerinated saline

(Kim et al., 2011).

1-YEAR SLIT OUTCOMES:

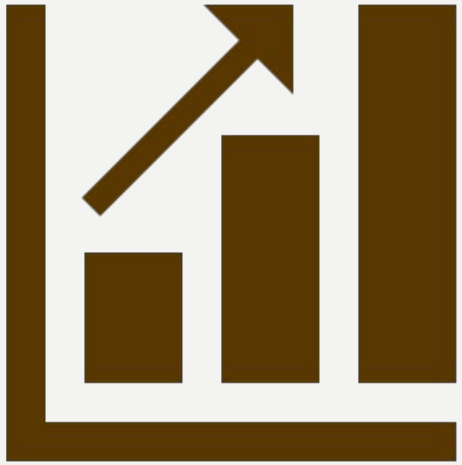
✔ Clinical desensitization

Extended SLIT is required to assess :

❑ Higher level of clinical desensitization

❑ Long-term clinical tolerance – sustained unresponsiveness (SU)

(Kim et al., 2019).

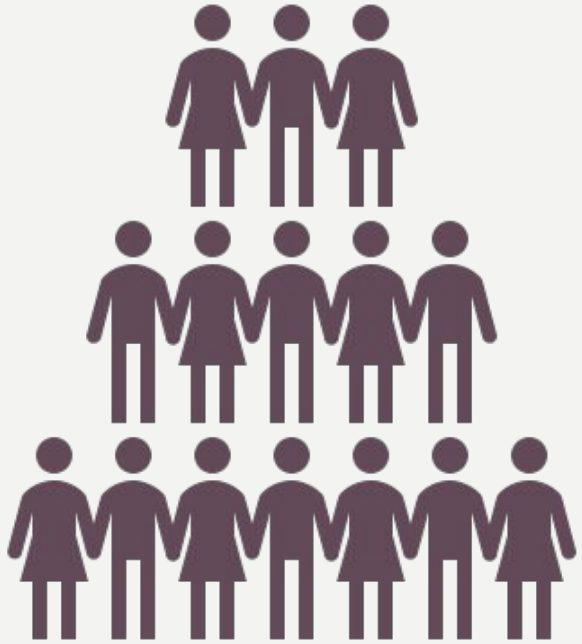


TREATMENT PLAN

1. 1-year SLIT
2. 5-year SLIT
3. DBPCFC assessment

(Kim et al., 2019).

1-YEAR SLIT



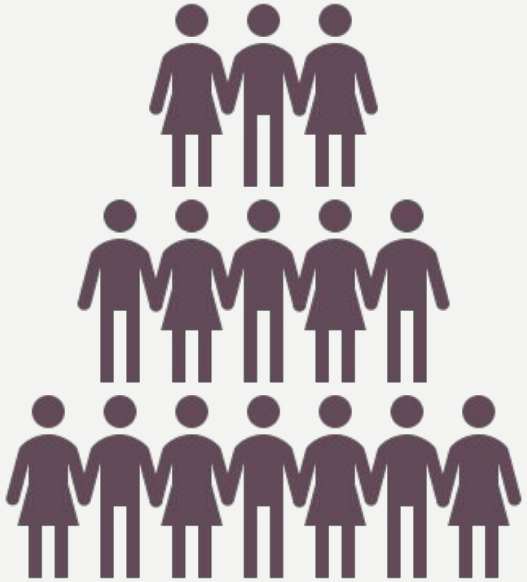
48 participants

age of 1 to 11 years
(Kim et al., 2019).

doses were biweekly increased from 0.25µg to 2000µg
(ibid).

2000µg daily maintenance dose of peanut protein
(ibid).

EXTENDED SLIT (5 YEARS)



45 participants

(3 withdrew)

(Kim et al., 2019).

2000µg daily maintenance dose of peanut protein

(ibid).

FINAL ASSESSMENT : DBPCFC

DOUBLE-BLIND, PLACEBO-CONTROLLED FOOD CHALLENGE

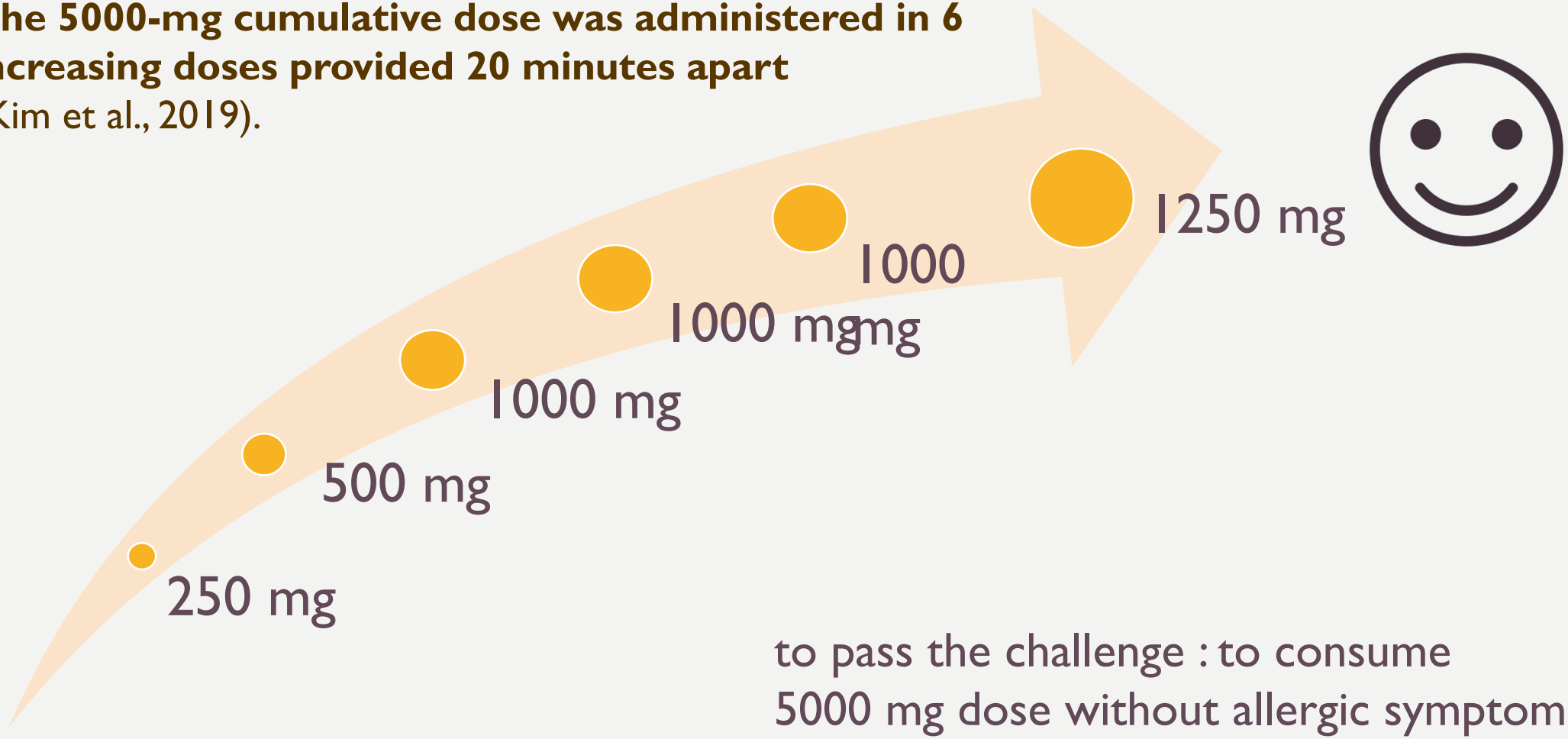
(Kim et al., 2019).

5000 mg of peanut protein
(ibid).

16-20 peanut kernels
(ibid).

DBPCFC

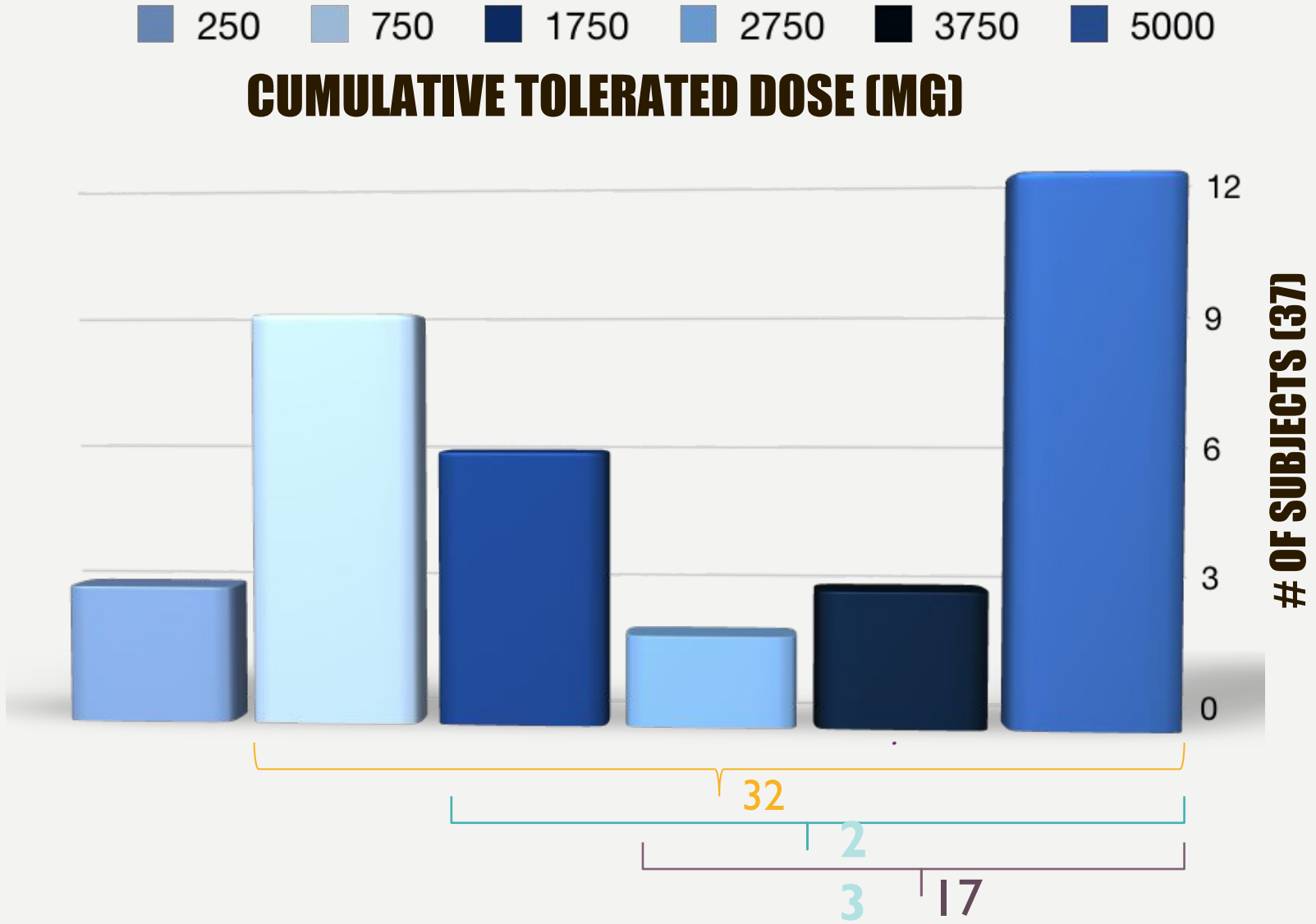
The 5000-mg cumulative dose was administered in 6 increasing doses provided 20 minutes apart (Kim et al., 2019).



to pass the challenge : to consume 5000 mg dose without allergic symptoms (ibid).

(Kim et al., 2019, p. 4, FIG 2).

Maximum value of DBPCFC total dose for each of 37 subjects



- 12 subjects passed 5000-mg DBPCFC
- Discontinued SLIT for 2-4 weeks
- 10 subjects again passed the DBPCFC, demonstrating SU

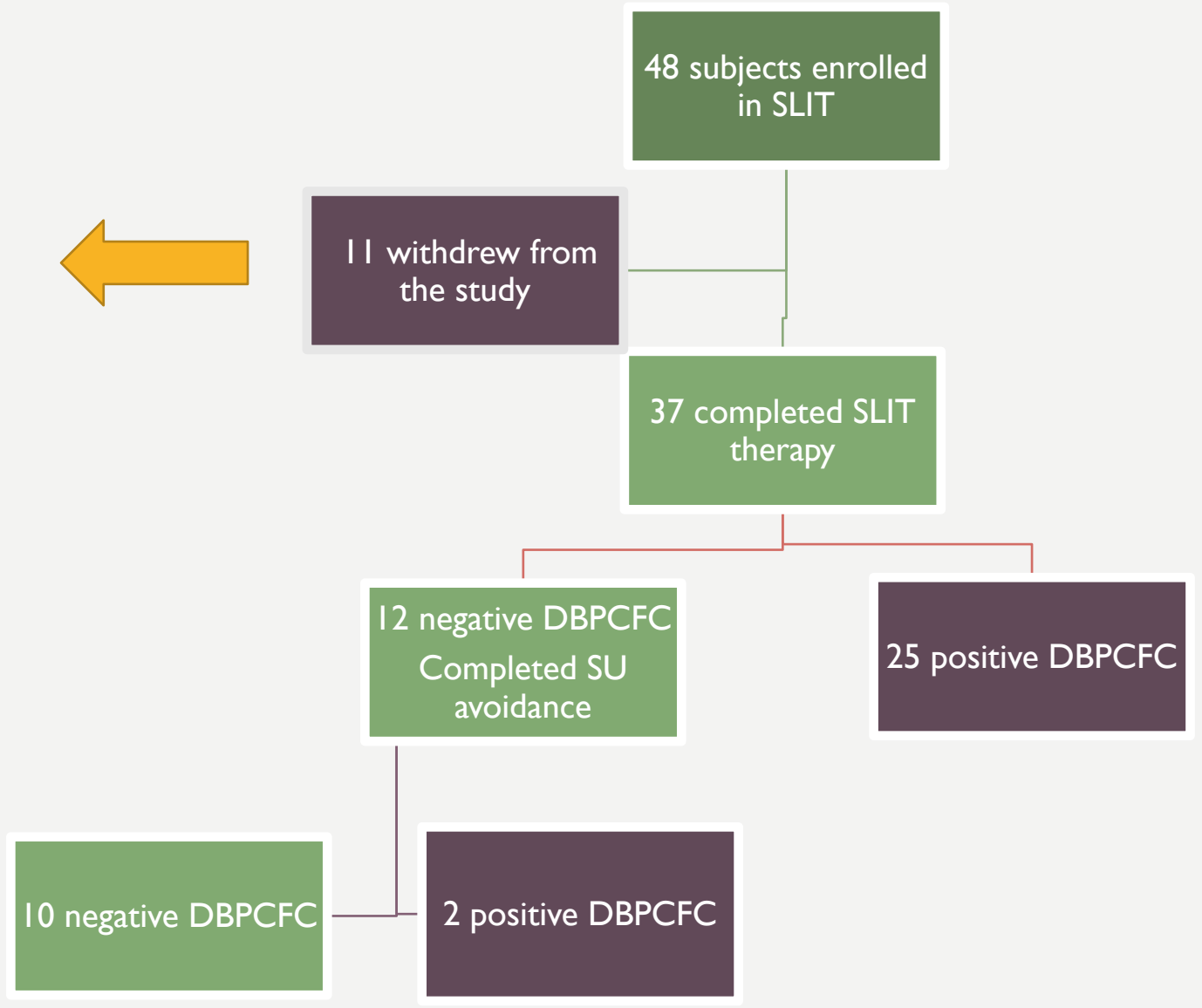
SUSTAINED UNRESPONSIVENESS (SU)

(Kim et al., 2019).

PARTICIPANT ALLOCATION THROUGHOUT THE TRIAL

(Kim et al., 2019, p. 3, FIG 1).

11 withdrew from the study	
1	Before SLIT dosing
1	Poor compliance
2	Recurrent abdominal pain
6	Voluntary
1	Lost to followup



SLIT SIDE EFFECTS

(Kim et al., 2019 , p. 4, TABLE II).

	Peanut SLIT (n = 48)
Total dosing days	78,915
Missed doses	3,549 (4.5%)
Total doses taken	75,366 (95.5%)
Dosing symptoms	3,599 (4.8%)
• Local	
• Oropharyngeal pruritus	2699 (3.6%)
• Lip swelling	115 (0.2%)
• Skin	387 (0.5%)
• Upper respiratory tract	75 (0.1%)
• Lower respiratory tract	69 (0.1%)
• Gastrointestinal	
• Belly pain	225 (0.3%)
• Vomiting	20 (0.03%)
• Diarrhea	5 (0.01%)
Treatment administered	
Antihistamine	158 (0.2%)
Epinephrine	0

EVALUATION

(Kim et al., 2019).

- ✔ effectiveness and safety of desensitization
- ✔ possible sustained unresponsiveness (SU)
- ❑ stability pattern of the post-SLIT desensitization effect
- ❑ biological markers instead of DBPCFC

ANY QUESTIONS?

- Bibliography

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