Supplemental materials

JID was selected over the higher impact *American Journal of Clinical Dermatology* since the latter had too few clinical articles meeting inclusion criteria to support our goal article extraction rate per journal per year, and *JID* was the next highest impact journal.

PubMed searches were performed by year and by journal. Within these parameters, the following article types were filtered for: adaptive clinical trial, clinical study, clinical trial, clinical trial I, II, III, IV, comparative study, controlled clinical trial, equivalence trial, evaluation studies, observational study, pragmatic clinical trial, and randomized controlled trial.

Once a query for a given journal and year was performed, the total number of resulting articles was noted. We requested 15 random numbers from the possible total using a random number generator (https://www.random.org/sequences/). For example, if 150 articles were found using the search criteria, we requested 15 random numbers from a number pool of 1-150. The resulting 15 numbers pertained to the result number from the PubMed search. If a selected study was identified by title or PubMed entry to be ineligible or duplicate by the reviewer, the next sequential study was selected.

Clinical trials were defined as the following: Randomized controlled trials were prospective studies of an intervention with a control group (placebo or active comparator or both) that discussed a random allocation process in the methods. Split body-site trials were considered in this category if randomly assigned.[2] Blinded, randomized, controlled trials were characterized as a randomized trial with the preceding characteristics plus methods described for blinding of subjects. Blinding in this category could include any degree of blinding. Trials that were not blinded, did not include methodology for randomization, were considered “clinical trials.” These could be controlled or uncontrolled.

Observational studies were defined as follows: Cohort studies could be either retrospective or prospective. These studies were defined as having an identified “exposure” with a follow-up time and then an estimate of outcome differences between exposed and unexposed. Case control studies were defined as studies where cases were identified based on outcome and controls without defined outcome were identified based on rules. Cross-sectional studies were defined as being evaluated at one time point (or serial time points of different populations). These could investigate prevalence or an association.

Article section word counts were determined by copy and pasting text from online or PDF full text articles into Microsoft Word and using the word count tool. Articles with citations that include text rather than superscripts were manually removed prior to performing word *Statistical Analysis:*
Dermatology literature
For multivariable models we believed important confounders of reporting quality and methods section length included overall article length, journal, reporting form used

(STROBE versus CONSORT), study topic, and funding source. These were selected as editorial practices and word limits are specific to the journal, and different levels of statistical support or oversight may be required for trials, studies receiving government or industry funding, and different study types. Lastly, we tested if the relationship between methods reporting score and methods section length was different between observational studies and trials using an interaction tern between method section length and form type. The equations for these models are summarized below.

$$Y_{(\text{method reporting score})} = a + \beta_1 X_{(\text{method section length})} + \beta_2 X_{(\text{Overall length})} + \varepsilon$$
(Equation 1)

$$Y_{(\text{method reporting score})} = a + \beta_1 X_{(\text{method section length})} + \beta_2 X_{(\text{Overall length})} + \beta_3 X_{(\text{checklist})} + \beta_4 X_{(\text{study topic})} + \beta_5 X_{\text{funding})} + \varepsilon$$
(Equation 2)

$$Y_{(\text{method reporting score})} = a + \beta_1 X_{(\text{method section length})} * X_{(\text{checklist})} + \beta_2 X_{(\text{methods section length})} + \beta_3 X_{(\text{checklist})} + \beta_4 X_{(\text{Overall length})} + \varepsilon$$
(Equation 3)

Comparison between dermatology and internal medicine: Simple comparison of reporting score between fields (dermatology versus internal medicine) was performed with Equation 4. Next, we adjusted this comparison for base confounders without inclusion of overall article length or methods section length (Equation 5). Methods section length and overall article length was subsequently added to assess how much these factors contributed to methods section reporting score variability (Equation 6). The interaction between field and methods section length is shown in Equation 7. Methods section length was compared between fields after adjusting for overall paper length (Equation 8) and after adjusting for confounders (Equation 9).

$$Y_{(\text{method reporting score})} = a + \beta_1 X_{(\text{field})} + \varepsilon$$
(Equation 4)

$$Y_{(\text{method reporting score})} = a + \beta_1 X_{(\text{field})} + \beta_2 X_{(\text{checklist})} + \beta_3 X_{(\text{study topic})} + \beta_3 X_{(\text{funding})} + \varepsilon$$
(Equation 5)

$$Y_{(\text{method reporting score})} = a + \beta_1 X_{(\text{field})} + \beta_2 X_{(\text{methods section length})} + \beta_3 X_{(\text{overall length})} + \beta_4 X_{(\text{study topic})} + \beta_5 X_{(\text{funding})} + \beta_6 X_{(\text{checklist})} + \varepsilon$$
(Equation 6)

$$Y_{(\text{method reporting score})} = a + \beta_1 X_{(\text{field})} * X_{(\text{methods section length})} + \beta_2 X_{(\text{field})} + \beta_3 X_{(\text{methods section length})} + \beta_4 X_{(\text{overall length})} + \varepsilon$$
(Equation 7)

$$Y_{(\text{method section length})} = a + \beta_1 X_{(\text{field})} + \beta_2 X_{(\text{overall length})} + \varepsilon$$
(Equation 8)

$$Y_{(\text{method section length})} = a + \beta_1 X_{(\text{field})} + \beta_2 X_{(\text{overall length})} + \beta_3 X_{(\text{checklist})} + \beta_4 X_{(\text{study topic})} + \beta_5 X_{(\text{funding})} + \varepsilon$$
(Equation 9)

CONSORT Checklists

Applied CONSORT checklist for BLINDED RANDOMIZED CLINICAL TRIALS

1a. Hypothesis/research objective given in the introduction

Trial Design

2a. Description of trial design

2b. Discussion of changes that occurred after trial commencement (or note there were none).

2c. Was the trial registered?

Participants

3a. Eligibility criteria discussed

3b. Settings and locations where data were collected discussed

Interventions

4a. Intervention for each described with enough detail to allow for replications, including how and when they were actually administered

Outcomes

5a. Completely defined pre-specified primary and secondary outcome measures, including how and when they were assessed

5b. If changes to outcome were made from registration, where these discussed with reasons? (yes = 0, no = -1)

Sample Size

6a. Process of sample size determination discussed

Study size

7a. Described how study size was arrived at

Randomization

8a. Method used to generate the random allocation sequence described

8b. Type of randomization specified, details of any restriction (such as blocking and block size described)

8c. Mechanism used to implement the random allocation sequence described

8d. Steps taken to conceal the sequence until interventions were assigned

8e. Who generated the random allocation sequence described

8f. Who enrolled participants described

8g. Who assigned participants to interventions described

Blinding

9a. Who was blinded after assignment to interventions (participants, vs care providers, those assessing outcomes etc) was discussed

9b. How was blinding done discussed

Statistical methods

10a. Statistical methods used to compare groups for primary and secondary outcomes described

Total: 20 points

Applied CONSORT checklist for RANDOMIZED TRIALS W/O BLINDING

1a. Hypothesis/research objective given in the introduction

Trial Design

2a. Description of trial design

2b. Discussion of changes that occurred after trial commencement (counts if they note there were none).

2c. Was the trial registered?

Participants

3a. Eligibility criteria discussed

3b. Settings and locations where data were collected discussed

Interventions

4a. Intervention for each described with enough detail to allow for replications, including how and when they were actually administered

Outcomes

5a. Completely defined pre-specified primary and secondary outcome measures, including how and when they were assessed

5b. If changes to outcome were made from registration, where these discussed with reasons? (yes = 0, no = -1)

Sample Size

6a. Process of sample size determination discussed

Study size

7a. Described how study size was arrived at

Randomization

8a. Method used to generate the random allocation sequence described

8b. Type of randomization specified, details of any restriction (such as blocking and block size described)

8c. Mechanism used to implement the random allocation sequence described

8d. Steps taken to conceal the sequence until interventions were assigned

8e. Who generated the random allocation sequence described

8f. Who enrolled participants described

8g. Who assigned participants to interventions described

Statistical methods

9a. Statistical methods used to compare groups for primary and secondary outcomes described

Total: 18 points

Applied CONSORT checklist for CLINICAL TRIALS

1a. Hypothesis/research objective given in the introduction

Trial Design

2a. Description of trial design

2b. Discussion of changes that occurred after trial commencement (or note there were none).

2c. Was the trial registered?

Participants

3a. Eligibility criteria discussed

3b. Settings and locations where data were collected discussed

Interventions

4a. Intervention for each described with enough detail to allow for replications, including how and when they were actually administered

Outcomes

5a. Completely defined pre-specified primary and secondary outcome measures, including how and when they were assessed

5b. If changes to outcome were made from registration, where these discussed with reasons? (yes = 0, no = -1)

Sample Size

6a. Process of sample size determination discussed

Study size

7a. Described how study size was arrived at

Statistical methods

8a. Statistical methods used to compare groups for primary and secondary outcomes described

Total: 11 points

STROBE Checklists

Applied methods STROBE guidelines for **COHORT** studies

1. Hypothesis/research objective given in the introduction (0 if not, 1 if yes)

Setting

2a. Setting: setting/location of study described
2b. Relevant dates described
2c. Relevant details of exposure described
2d. Data collection methods described

Participants

3a. Eligibility criteria described
3b. Sources and methods of participant selection described
3c. How follow-up was handled described

Variables

4a. Defined outcomes
4b. Defined predictors/confounders

Data sources/measurement

5a. For each variable, gave sources of data (where variables came from)
5b. Described how important variables were measured

Bias

6a. Described any efforts to address potential sources of bias

Study size

7a. Described how study size was arrived at

Quantitative variables

8a. Methods of handling quantitative variables discussed
8b. If continuous or quantitative variables were grouped was reasoning for grouping discussed? (if yes = 1 if no for predictor variable = 0 and if no for outcome variable = -1)

Statistical methods

9a. Statistical methods for arriving at primary outcome described
9b. Methods for dealing with confounding (or why these couldn't be used) was discussed
9c. Method of dealing with missing data discussed
9d. If loss to follow-up is applicable, was a discussion of how to address this done (if yes 0 if no = -1)
9e. If sensitivity analyses were done, were they described (if doesn't apply [not done] then 0, if yes 0 if no = -1)

Total: 19 points

Applied STROBE guidelines for **CASE-CONTROL** studies

1. Hypothesis/research objective given in the introduction

Setting

2a. Setting: setting/location of study described
2b. Relevant dates described
2c. Relevant details of exposure described
2d. Data collection methods described

Participants

3a. Eligibility criteria described
3b. Sources and methods of case ascertainment and control selection
3c. Rationale given for choice of cases and controls

Variables

4a. Defined outcomes
4b. Defined variable classifications (i.e. exposures/predictors/confounders/effect modifiers)

Data sources/measurement

5a. For each variable, gave sources of data
5b. Described how important variables were measured

Bias

6a. Described any efforts to address potential sources of bias

Study size

7a. Described how study size was arrived at

Quantitative variables

8a. Methods of handling quantitative variables discussed
8b. If continuous or quantitative variables were grouped was reasoning for grouping discussed? (if yes = 0 if no = -1)

Statistical methods

9a. Statistical methods for arriving at primary outcome described
9b. Methods for dealing with confounding (or why these couldn't be used) was discussed
9c. Method of dealing with missing data discussed
9d. If matching was performed, was how this was dealt with described? (if yes 0 if no = -1)
9e. If sensitivity analyses were done, were they described (if yes 0 if no = -1)

Total: 18 points

Applied STROBE guidelines for **CROSS-SECTIONAL or OTHER** studies

1. Hypothesis/research objective given in the introduction

Setting

2a. Setting: setting/location of study described
2b. Relevant dates described
2c. Relevant details of exposure described
2d. Data collection methods described

Participants

3a. Eligibility criteria described
3b. Sources and methods of participant selection

Variables

4a. Defined outcomes
4b. Defined exposures/predictors/confounders/effect modifiers

Data sources/measurement

5a. For each variable, gave sources of data
5b. Described how important variables were measured

Bias

6a. Described any efforts to address potential sources of bias

Study size

7a. Described how study size was arrived at

Quantitative variables

8a. Methods of handling quantitative variables discussed
8b. If continuous or quantitative variables were grouped was reasoning for grouping discussed? (if yes = 0 if no = -1)

Statistical methods

9a. Statistical methods for arriving at primary outcome described
9b. Methods for dealing with confounding (or why these couldn't be used) was discussed
9c. Method of dealing with missing data discussed
9d. If applicable, was analytical methods for how to address sampling strategy discussed? (if yes 0 if no = -1) (For survey data, they need to discuss what sampling type they did and what they did about it)
9e. If sensitivity analyses were done, were they described (if yes 0 if no = -1)

Total: 17 points