PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (http://bmjopen.bmj.com/site/about/resources/checklist.pdf) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	The efficacy and optimal dose of Acetic Acid to treat colonised burns wounds: protocol for a pilot randomized controlled trial
AUTHORS	Imran, Rizwana; Hassouna, Tarek; Sur, Gurneet; Casey, Anna; Homer, Victoria; Barton, Darren; Brock, Kristian; Altarrah, Khaled; Moiemen, Naiem

VERSION 1 – REVIEW

REVIEWER	Jault, Patrick Clinique de la Muette
REVIEW RETURNED	17-Nov-2021

GENERAL COMMENTS	Thank you for your paper.
	Interesting trial, assessment go acetic acid is poor in literature and could be really useful to consider in case of massive burnt victims with imbalance between needs snd ressources

REVIEWER	Gunter, Christina
	Technical University of Munich
REVIEW RETURNED	19-Dec-2021

GENERAL COMMENTS	The trial recruits patients from the age of 16, please state clearly the regulatory situation wich allowes to recruit underaged patients. We understand the challenging situation of CORVID-19 and the nececcity to adapt for this. But a change from 5 to 3 treatment days seems to be a quite big difference. Please comment on the measures you took to compensate for this. The inclusion criteria of over 1% TBS seems to be very variable, as clinicaly it is a big difference if you treat 1% TBS or more than 20% TBA. Please comment on any measures you took to compensate
	this. In addition especially regarding your outcome of time until 95% wound healing, it is a big difference if you treate a 2a or a 3 degree
	burn wound. Please comment on any measures you took to compensate this. The quality of the figures is very poor, please
	provide figures in the required quality. Please have the manuscriped
	corrected for spelling and grammar.

VERSION 1 – AUTHOR RESPONSE

In response to first point: 'The trial recruits patients from the age of 16, please state clearly the regulatory situation wich allowes to recruit underaged patients'.

'These patients are not classed as underage in an IMP trial in the UK ; consent for themselves i.e. 16+ are considered adults and can consent for medical treatment without parental consent. We had

no issue gaining ethical approval'

2nd point: 'But a change from 5 to 3 treatment days seems to be a quite big difference. Please comment on the measures you took to compensate for this'.

In light of COVID 19 pandemic and the changes in the standard care pathways, to shorten the period of hospital stay especially for individuals with small burns, the trial dressing period would be shortened from 5 days to 3 days. So, individuals recruited will have 5 wound dressings instead of 9. Interim analysis of 11 subjects support this proposed change of the study design as there was an increase in bacterial colonisation on day 4 am, compared to day 2 and 3'.

3rd point: The inclusion criteria of over 1% TBS seems to be very variable, as clinically it is a big difference if you treat 1% TBS or more than 20% TBA. Please comment on any measures you took to compensate this. In addition especially regarding your outcome of time until 95% wound healing, it is a big difference if you treat a 2a or a 3 degree.

There is a wide range from 1-20% TBSA burns in inclusion criteria. The dressing used in the study is approx size covering 1% TBSA and that is main area monitored for healing and signs of infection. In patient's inclusion and exclusion criteria clinician's opinion is taken in to consideration. In case of 3rd and 4th degree burn if patient requires surgery to enhance recovery then they are not included in the study.

Point no 4. I will upload better figures.

'Ethics and dissemination' section has been added to the abstract.

'target number of participants in the abstract' has been updated.

'Strengths and limitations' has been edited.

SPIRIT check list has been be uploaded.