

Appendix 2.

Table 3. The result of the JBI Critical Appraisal Tools.

Study ID	Were the criteria for inclusion in the sample clearly defined? *there are no defined characteristics that mean a healthy person (e.g., lips without trauma, damage, etc.), only the population and age of healthy people are defined. ** undesirable pathologies of the lips are not defined (e.g., inflammation, ulcers, etc.) *** exclusion criteria: only hypersensitivity to cosmetics and lesions on the lips.	Were the study subjects and the setting described in detail? * respondents are not well selected (sex and / or inclusion and exclusion criteria) ** missing place and / or institution and / or sex and / or age	Was the exposure measured in a valid and reliable way?	Were objective, standard criteria used for measurement of the condition?	Were the confounding factors identified?	Were strategies to deal with confounding factors stated?	Were the outcomes measured in a valid and reliable way?	Was appropriate statistical analysis used? yes - used tests (t, z, etc.) and P value yes * - tests used and inter and intrameasurement error yes ** - used tests and reliability unclear - percentages or percentages and P values
Ahmed, S. A., et al., 2018 [16]	Yes	Unclear	No	Yes	Yes	NA	Unclear	Yes
Ahuja, P., et al., 2018 [17]	Unclear*	Unclear*	No	Yes	Unclear*	NA	Unclear	Unclear

Alzapur, A., et al., 2017 [18]	Yes	Yes	No	Yes	Yes	NA	Unclear	Unclear
Amith, H. V., et al., 2012 [19]	No	No	No	Yes	No	NA	Unclear	Yes
Anu, V., et al., 2020 [21]	Yes***	Unclear	No	Yes	Yes***	NA	Unclear	Unclear
Augustine, J., et al., 2008 [22]	Unclear	Yes	No	No	Unclear	NA	Unclear	Unclear
Aziz, M. H. A., et al., 2016 [23]	Yes	Yes	No	Yes	Yes	NA	Unclear	Yes
Babladi, P.I., et al., 2012 [24]	Unclear***	Yes	No	Yes	Unclear***	NA	Unclear	Unclear
Badiye, A., et al., 2016 [25]	Yes	Yes	Yes	Yes	Yes	NA	Unclear	Yes*
Bai, J. S., et al., 2018 [26]	Yes	Unclear**	No	Yes	Yes	NA	Unclear	Yes*
Ballur, M.S., et al., 2016 [28]	Unclear*	Yes	No	Yes	Unclear*	NA	Unclear	Unclear
Bansal, A.K., et al., 2019 [30]	Yes	Yes	No	Yes	Yes	NA	Unclear	Unclear
Bansal, N., et al., 2014 [31]	Yes	Yes	No	No	Yes	NA	Unclear	Yes

Basheer, S., et al., 2017 [32]	Yes	Yes	No	Yes	Yes	NA	Unclear	Yes
Bharat Kumar, E.D., 2017 [33]	Yes	Yes	No	Yes	Yes	NA	Unclear	Unclear
Bharathi, S., et al., 2015 [34]	Unclear***	No	No	Yes	Unclear***	NA	Unclear	Unclear
Borase, A. P., et al., 2016 [35]	Unclear*,**	Yes	No	No	Unclear*,**	NA	Unclear	Unclear
Chaudhari, S.H., et al., 2017 [36]	Yes	Yes	No	Yes	Yes	NA	Unclear	Unclear
Costa, V.A., et al., 2012 [4]	Yes	Yes	No	Yes	Yes	NA	Unclear	Yes
Dey, A., et al., 2019 [37]	Yes	Yes	No	Yes	Yes	NA	Unclear	Yes
Divyadharsini, V., et al., 2019 [38]	Yes	Yes	No	Yes	Yes	NA	Unclear	Yes
Dixit, A., et al., 2019 [39]	No	Unclear**	No	Unclear	No	NA	Unclear	Unclear
El Domiaty, M.A., et al., 2010 [1]	Yes	Yes	No	Yes	Yes	NA	Unclear	Unclear
Gouda, S., et al., 2017 [41]	Yes	Unclear**	No	Yes	Yes	NA	Unclear	Unclear

Gupta, S., et al., 2014 [42]	Yes	Unclear**	Yes	Yes	Yes	NA	Yes	Unclear
Gupta, S., et al., 2011 [43]	Yes	Unclear**	No	Yes	Yes	NA	No	Unclear
Hammad, M., et al., 2014 [6]	Yes	Yes	No	Yes	Yes	NA	Unclear	Yes
Herrera,L.M., et al., 2018 [44]	Yes	Unclear**	No	Yes	Yes	NA	Unclear	Yes
Ishaq, N., et al., 2018 [45]	Yes	Yes	No	Yes	Yes	NA	Unclear	Unclear
Jeergal, P. A., et al. 2016 [46]	Yes	Yes	No	Yes	Yes	NA	Unclear	Yes
Kapoor, N., et al., 2017 [47]	Yes	Yes	Yes	Yes	Yes	NA	Yes	Yes*
Karki, R.K., 2012 [48]	Unclear**	Yes	No	Yes	Unclear**	NA	Unclear	Unclear
Kaul, R., et al., 2015[49]	Yes	Yes	No	Yes	Yes	NA	Unclear	Yes**
Kautilya, D.V., et al., 2013 [50]	Yes	Yes	No	Yes	Yes	NA	Unclear	Yes
Kelasi, P.S.A., et al., 2019 [51]	Yes	Yes	No	Yes	Yes	NA	Unclear	Unclear

Kinra, M. et al., 2014 [52]	Yes	Yes	Yes	Yes	Yes	NA	Yes	Yes*
Koneru, A., et al., 2013 [53]	Yes	Yes	No	Yes	Yes	NA	Unclear	Yes
Krishnan, R. P., et al., 2016 [54]	Unclear**	Yes	No	Yes	Unclear**	NA	Unclear	Unclear
Manikya, S., et al., 2018 [55]	Yes	Yes	No	Yes	Yes	NA	Unclear	Yes*
Mantilla Hernandez, J.C., et al., 2015 [56]	Yes	Yes	No	Yes	Yes	NA	Unclear	Unclear
Moshfeghi, M., et al., 2016 [57]	Yes	Yes	Yes	Yes	Yes	NA	Yes	Yes*
Multani, S., et al., 2014 [58]	Yes	Yes	No	Yes	Yes	NA	Unclear	Yes
Nagalaxmi, V., et al., 2014 [59]	Yes	Yes	Yes	Yes	Yes	NA	Yes	Yes*
Nagasupriya, A., et al., 2011 [60]	Unclear**	Unclear*	No	Yes	Unclear**	NA	Unclear	Yes
Nagpal, B., et al., 2015 [62]	Unclear*	Yes	No	Yes	Unclear*	NA	Unclear	Unclear
Naik, R., et al., 2017 [63]	No	Unclear*	No	Yes	No	NA	Unclear	Unclear

Negi, A., et al., 2016 [64]	No	No	No	Yes	No	NA	Unclear	Yes
Oliveira, J.A., et al., 2012 [65]	Unclear*	Unclear**, *	No	Yes	Unclear*	NA	Unclear	Yes
Padmavathi, B. N., et al., 2013 [66]	No	No	No	Yes	No	NA	Unclear	Unclear
Peeran, S. W., et al., 2015 [67]	Unclear*	Unclear*	No	Yes	Unclear*	NA	Unclear	Yes
Popa, M. F., et al., 2013 [68]	Unclear*	Unclear*	No	Yes	Unclear*	NA	Unclear	Yes
Prabhu, R.V., et al., 2012 [69]	Yes	Unclear**	No	Yes	Yes	NA	Unclear	Unclear
Verma, P., et al., 2013 [92]	Unclear*	Unclear*	Yes	Yes	Unclear*	NA	Yes	Yes*
Prasad, P., et al., 2011 [70]	Unclear*,**	Unclear*	No	No	Unclear*,**	NA	Unclear	Unclear
Priya, S.P., et al., 2019 [71]	Unclear**, *	Unclear	No	Yes	Unclear**, *	NA	Unclear	Yes
Priyadharshini, K. I., et al., 2018 [7]	Yes	Yes	Yes	Yes	Yes	NA	Yes	Yes*
Ragab, A. R., et al., 2013 [72]	Unclear*	Unclear*	No	Yes	Unclear*	NA	Unclear	Yes

Ramakrishnan, P., et al., 2015 [73]	Unclear*	No	Yes	Yes	Unclear*	NA	Yes	Yes*
Randhawa, K., et al., 2011 [74]	Unclear*	Unclear**, *	No	Yes	Unclear*	NA	Unclear	Yes
Sagar, S., et al., 2019 [76]	Yes	Unclear**	No	Yes	Yes	NA	Unclear	Yes
Sandhu, H., et al., 2017 [77]	Yes	Yes	Yes	Yes	Yes	NA	Yes	Yes*
Senthil, K.M., et al., 2017 [78]	Yes	Yes	No	Yes	Yes	NA	Unclear	Unclear
Shah, K.K., et al., 2015 [79]	Yes	Unclear**	No	Yes	Yes	NA	Unclear	Unclear
Sharma, P., et al., 2009 [80]	Unclear**	Unclear**	No	Yes	Unclear**	NA	Unclear	Yes
Sharma, R., et al., 2015 [81]	Unclear*	Yes	No	Yes	Unclear*	NA	Unclear	Yes
Sharma, V., et al., 2014 [82]	Yes	Yes	No	Yes	Yes	NA	Unclear	Yes
Šimović, M., et al., 2016 [9]	No	No	No	Yes	No	NA	Unclear	Yes**
Singh, J., et al., 2012 [83]	Unclear*, **	Unclear*	No	Yes	Unclear*, **	NA	Unclear	Yes

Sonal, V., et al., 2005 [84]	Unclear*, **	Unclear**, *	No	Yes	Unclear*, **	NA	Unclear	Yes
Tandon, A., et al., 2017 [85]	No	No	No	Yes	No	NA	Unclear	Yes
Thermadam, T.P., et al., 2020 [86]	Yes	Yes	No	Yes	Yes	NA	Unclear	Yes
Thomas, A.J., et al., 2018 [87]	Unclear*	Unclear**	No	Yes	Unclear*	NA	Unclear	Yes
Topczydlo, A., et al., 2018 [88]	Unclear**	Unclear*, **	No	Yes	Unclear**	NA	Unclear	Yes
Vaishnavi, A., et al., 2019 [89]	Unclear*, **	Unclear*	No	Yes	Unclear*, **	NA	Unclear	Unclear
Vats, Y., et al., 2012 [90]	Unclear*	Unclear*	No	Yes	Unclear*	NA	Unclear	Unclear
Vergheze, A. J., et al. [91]	Unclear**	Yes	No	Yes	Unclear**	NA	Unclear	Unclear
Yandava, S., et al., 2020 [93]	Yes	No	No	Yes	Yes	NA	Unclear	Unclear
Yendriwati, et al., 2019 [94]	Yes	Yes	No	Yes	Yes	NA	Unclear	Yes
Zaaba, N. A. A. B., et al., 2020 [95]	Yes	Yes	No	Yes	Yes	NA	Unclear	Yes

This study	Yes	Unclear	No	Yes	Yes	NA	Unclear	Yes
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