## Commentary on "Association of Circumcision Status with Genital Lichen Planus: A Systematic Review and Meta-analysis"

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## Sir,

We would like to draw to your attention to a serious error in the calculations used by Chang et al. (1) in their analysis of data that we published on the association between circumcision and genital dermatoses (2).

In our study of 357 patients attending a Penile Dermatoses clinic we found that 27/39 patients with lichen planus were uncircumcised (69%; age adjusted OR 2.11). Chang et al. (1) took our number of 39 cases of lichen planus and incorrectly and without any rationale calculated that 12/82 cases were circumcised and 27/275 were uncircumcised. They have not correctly used our data in their meta-analysis and have mis-represented the results of our study.

Chang et al. (1) concluded that their meta-analysis indicated a higher risk of male genital lichen planus in circumcised men. However, given this egregious flaw in their use of our data this conclusion cannot be justified and, unless a recalculation based on the correct figures proves otherwise, should be retracted and/or modified.

## Reply to the Comment by Mallon & Bunker

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We are grateful for the valuable comments from Mallon and Bunker on our article (1). The major concern is the method for original data extraction from study by Mallon et al. (2) for our meta-analysis. After carefully reviewing the data of Mallon's study, we found that the major difference arises from the subject selection in the study design between the above studies. Mallon et al. recruited 357 male patients with genital skin diseases and 305 male patients without genital skin diseases as controls, and determined the association of circumcision and each male genital dermatosis. However, in our study, we investigated the association of circumcision status and genital lichen planus (LP). All subjects in our study were selected from the male patients with at least one genital skin disease in the same clinical facility. Consistently, we used the same inclusion criteria for data extraction in the other two studies that were pooled in our meta-analysis.

In our pooled estimates, we used circumcision as a risk factor of exposure and the outcome was incidence of genital LP. For data from Mallon et al. (2) in our Table I, 12 and 27 patients with genital LP were among the 82 circumcised and 275 uncircumcised patients with any genital skin disease, respectively. Our conclusion is opposite to that of Mallon's study, but our results should be interpreted with caution because the control group in our meta-analysis was selected from male patients with at least one genital dermatoses rather than healthy men. Due to relatively low numbers of studies in our meta-analysis, further case-control studies, cohort studies, or even randomized controlled trials are warranted to provide more evidence to confirm the association between the circumcision status and genital LP.

We appreciate your comments on our article and we hope that our explanation has addressed your concerns.

- Chang HC, Sung CW, Lin MH. Association of circumcision status with genital lichen planus: a systematic review and meta-analysis. Acta Derm Venereol 2019; 99: 1049–1050.
- Mallon E, Hawkins D, Dinneen M, Francics N, Fearfield L, Newson R, Bunker C. Circumcision and genital dermatoses. Arch Dermatol 2000; 136: 350–354.