

# ACNE IN TRANSGENDER PATIENTS ON TESTOSTERONE REPLACEMENT THERAPY: A SYSTEMATIC REVIEW



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## Conflict of Interest:

The authors declare there are no conflicts of interest in relation to this poster presentation.

## LEARNING OBJECTIVES:

- 1) Understand the literature base for study of acne in transgender patients
- 2) Understand reported acne rates on transgender patients on hormonal replacement therapy
- 3) Understand variability in acne rates in transgender males between formulations of testosterone

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## INTRODUCTION

- Given the role of hormone levels in the etiology of acne, transgender patients on hormone replacement therapy (HRT) may be particularly susceptible to acne manifestation. This study aims to assess the prevalence and severity of acne in transgender patients on HRT.

## METHODS

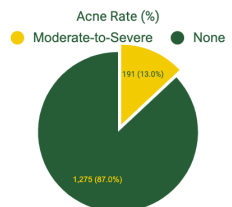
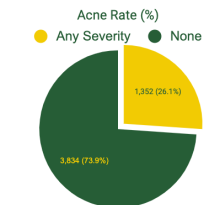
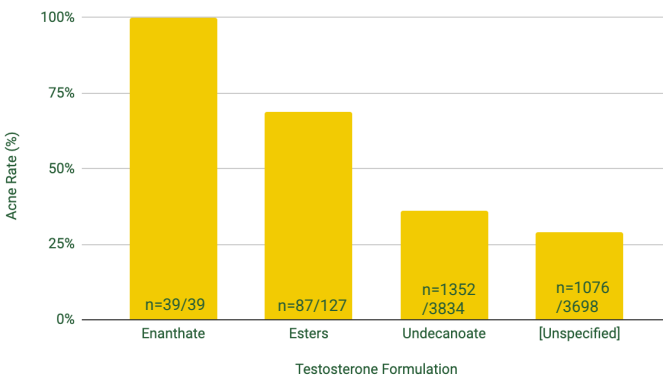
- MEDLINE, Embase, and PubMed were searched on July 18, 2023
- Keywords: variations of "transgender" AND "hormone replacement therapy" AND "acne" OR "acneiform eruption".
- No date or language restrictions were applied.
- Title, abstract, full-text screening, and data extraction were conducted by two independent reviewers.

## RESULTS

After screening 141 studies, 35 studies summarizing outcomes of 5183 transmen on testosterone therapy were ultimately included. Twenty studies reported an overall rate of developing acne of any severity of 35% (n=1,352/3,834). Fourteen studies reported a mean rate of development of moderate-to-severe acne as a side effect of HRT of 15% (n=191/1275).

Acne rates among testosterone formulations: enanthate 100% (n=39/39), esters 69% (n=87/127), undecanoate 36% (n=71/196), testosterone [unspecified] 29% (n=1076/3698). Many studies did not differentiate acne prevalence amongst formulations used.

Table 1 Acne Rates (%) Per Formulation



## CONCLUSIONS

- The hormonal impact on acne is well established in the literature and our results further corroborate this. Our findings support a high prevalence of both acne of any severity (35%) and moderate-to-severe acne (15%) in this population, therefore consideration should be given to pre-emptive management of acne in male transgender patients receiving HRT.
- Moderate-to-severe acne can have a significant impact on quality of life, therefore further studies are needed to characterize severity and treatment outcomes of acne in the male transgender populations receiving HRT.