

INTRODUCTION

- Facial feminization surgery has become a key component of the male to female transition, with popularity rising exponentially in recent years
- Most available studies have looked at single ethnicities and races, and have not garnered sufficient power to well represent the aesthetic and gender defining perceptions of the general population
- This study **aims** to determine which facial features are viewed as most masculine or feminine across biological sex and ethnicity.

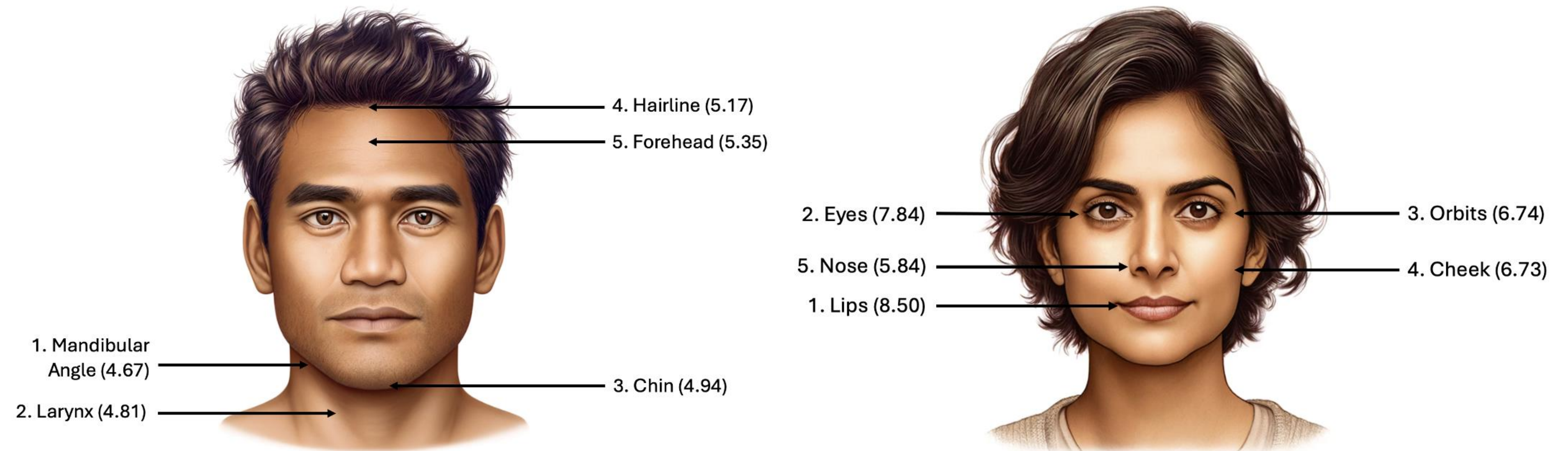
METHODS

- Four web-based survey instruments were used, displaying an image set of artificial intelligence-generated facial photos of a cis-man and a cis-woman from each of the following ethnicities - Black, Asian, Oceanic, South Asian, and White.
- Each survey evaluated the masculinity or femininity of specific facial components through various techniques to eliminate responder bias.
- Respondents voluntarily completed online consent forms and were randomly directed to one of the four survey instruments. Responses were de-identified to ensure anonymity. Faces were divided into 11 unique components, and were rated on a scale from 1 (most masculine) to 11 (most feminine).

RESULTS

- 2,566 total respondents across all survey instruments
- **Most Masculine Features (p<0.05):** Mandibular Angle (4.67), Laryngeal Prominence (4.81), Chin (4.94)
- **Most Feminine Features (p<0.05):** Lips (8.50), Eyes (7.84), Orbits (6.74)

Figure 1. Most masculine (left) and feminine (right) features of the face of the face. Features were determined using means and testing for significance between top five features using t-tests (p<0.05). Means are on a scale from 1 (most masculine) to 11 (most feminine). All comparisons were significant (p<0.05).



- When responses were separated by *respondent gender*:
 - **Male Respondents** found the lips to be the most feminine feature in all facial images except for the Pacific Islander Female (Eyes) (p<0.05)
 - **Female Respondents** found the lips to be the most feminine feature in all facial images except for the Black Female and White Male (Eyes) (p<0.05)

CONCLUSION

Perceptions of femininity in facial features **vary significantly** across different ethnic groups This data serves as a guide for tailoring techniques to accommodate each patient's unique preferences in order to achieve more satisfactory and ethnically congruent results.