Attribute Augmented Convolutional Neural Network for Face Hallucination Supplementary Material

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1. Overview

This supplementary material shows more visual results of comparing with state-of-the-art methods on both global and local regions. Fig. 1 shows comparison with the state-of-the-art methods on hallucination global test dataset. Fig. 2 shows comparison with the state-of-the-art methods on hallucination local test dataset which is eyeglasses on "eye" part. Fig. 3 shows comparison with the state-of-the-art methods on hallucination local test dataset which is goatee on "mouth & nose" part. Fig. 4 shows comparison with the state-of-the-art methods on hallucination local test dataset which is heavy makeup on "face" part.

References

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[2] X. Ma, J. Zhang, and C. Qi. Hallucinating face by position-patch. *Pattern Recognition*, 43(6):2224–2236, 2010.

[3] X. Yu and F. Porikli. Ultra-resolving face images by discriminative generative networks. In *European Conference on Computer Vision*, pages 318–333. Springer, 2016.

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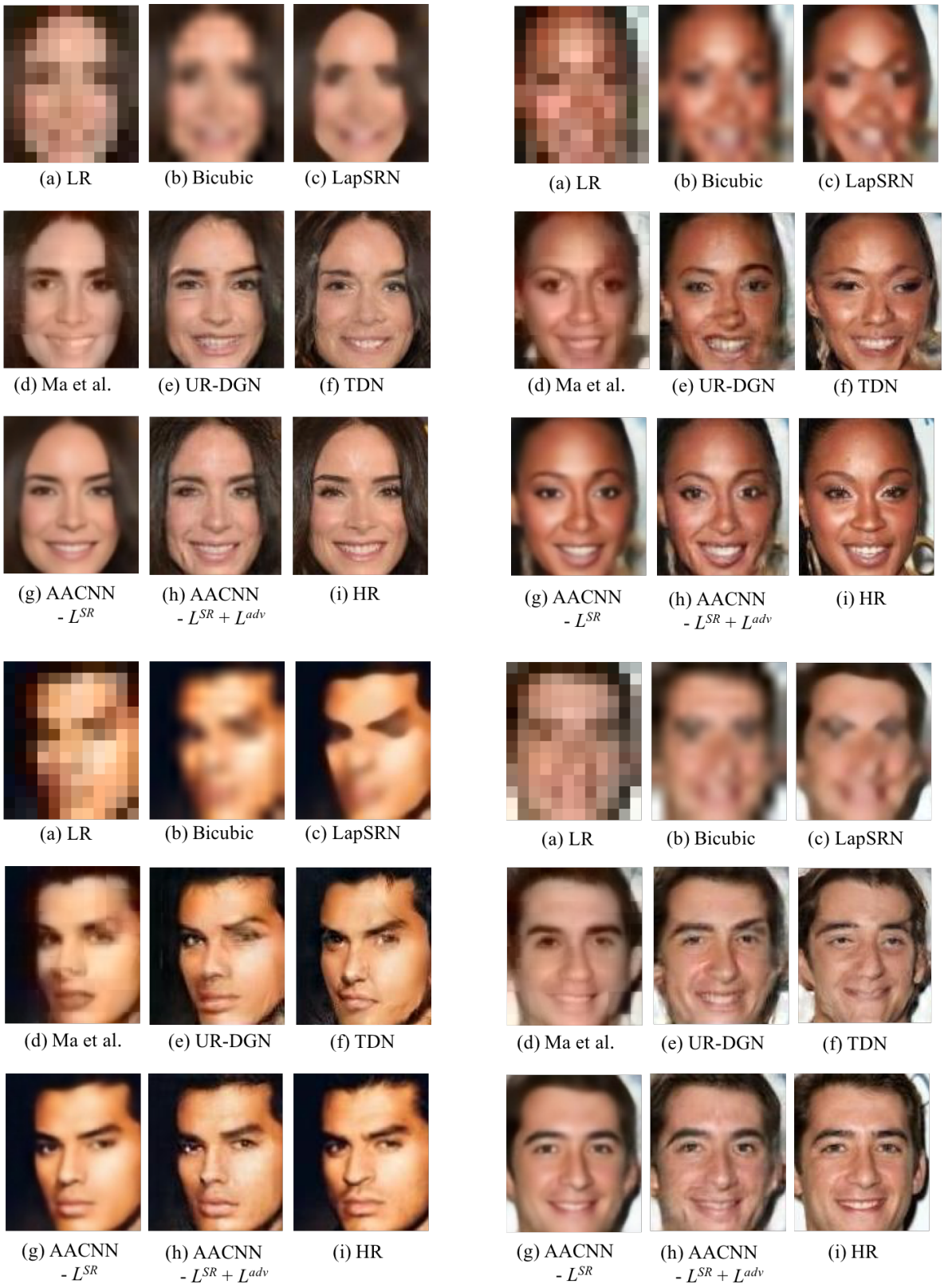

Figure 1. Comparison with the state-of-the-art methods on hallucination global test dataset. (a) Low-resolution inputs images. (b) Bicubic interpolation. (c) LapSRN [1]. (d) Ma et al. [2]. (e) UR-DGN [3]. (f) TDN [4]. (g) AACNN - L^{SR}. (h) AACNN - $L^{SR} + L^{adv}$. (i) High-resolution images.

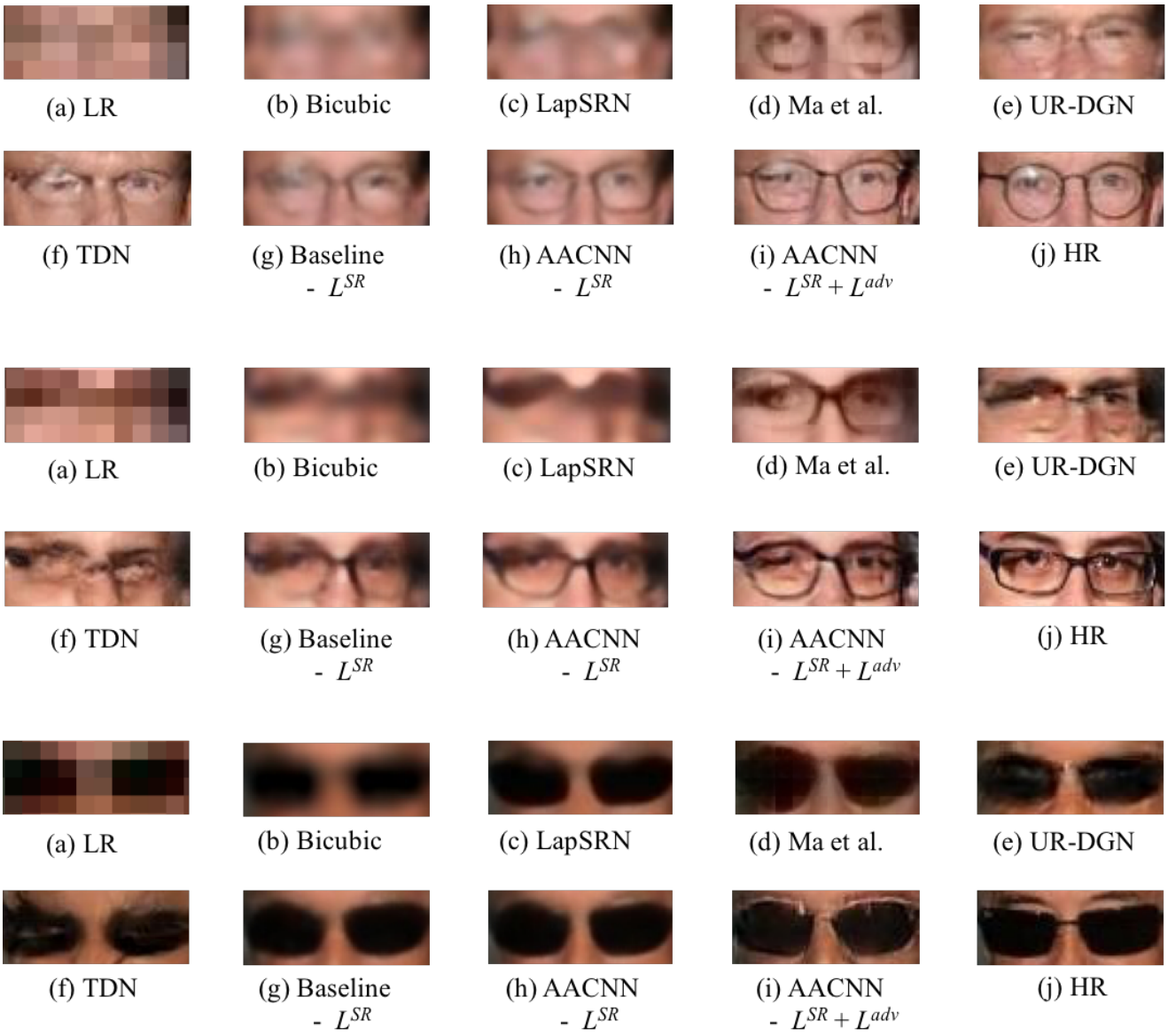

Figure 2. Comparison with the state-of-the-art methods on hallucination local test dataset which is eyeglasses on "eye" part. (a) Low-resolution inputs images. (b) Bicubic interpolation. (c) LapSRN [1]. (d) Ma et al. [2]. (e) UR-DGN [3]. (f) TDN [4]. (g) Baseline - L^{SR}. (h) AACNN - L^{SR}. (i) AACNN-$L^{SR} + L^{adv}$. (j) High-resolution images.

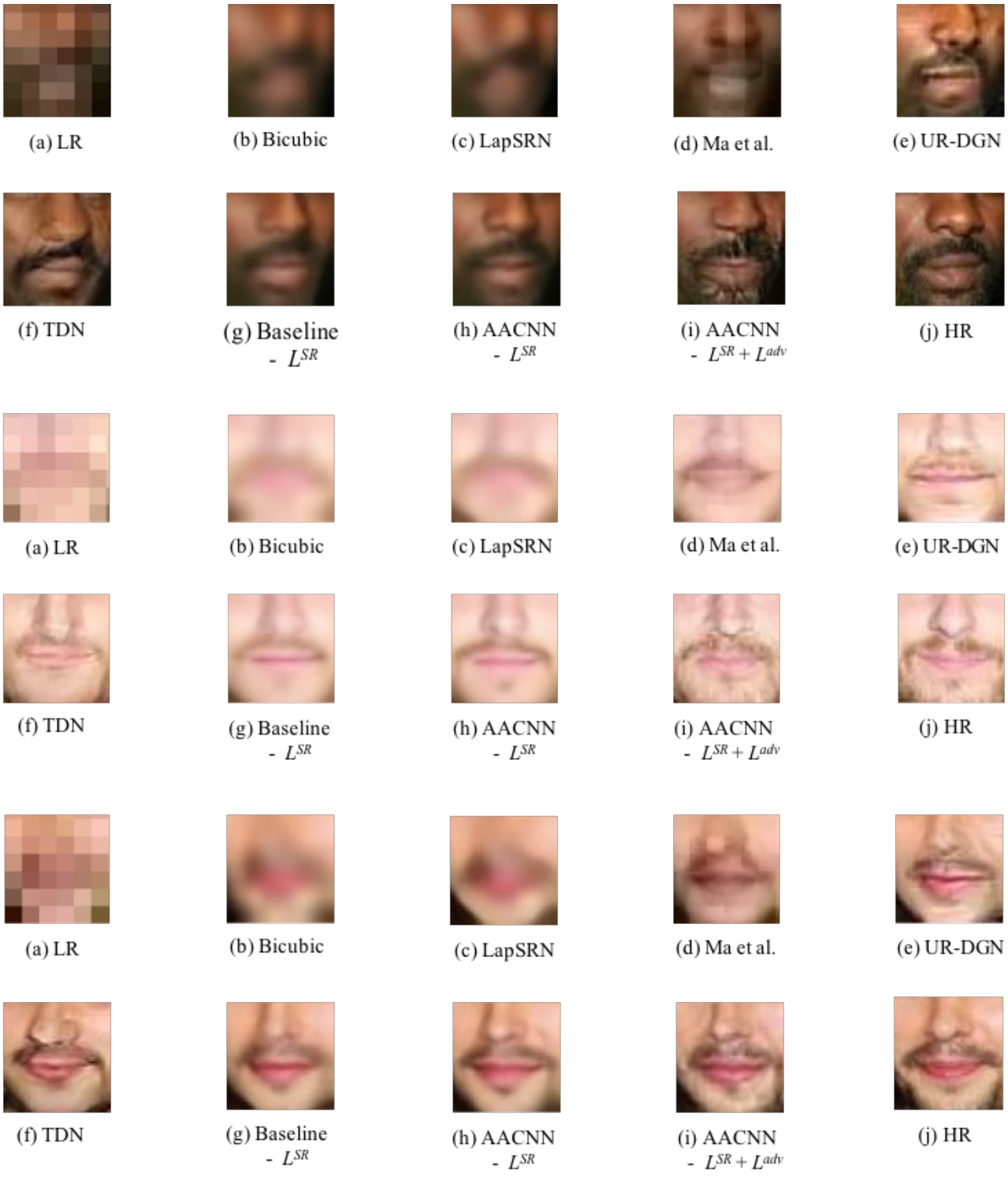

Figure 3. Comparison with the state-of-the-art methods on hallucination local test dataset which is goatee on "mouth & nose" part. (a) Low-resolution inputs images. (b) Bicubic interpolation. (c) LapSRN [1]. (d) Ma et al. [2]. (e) UR-DGN [3]. (f) TDN [4]. (g) Baseline - L^{SR}. (h) AACNN - L^{SR}. (i) AACNN-$L^{SR} + L^{adv}$. (j) High-resolution images.

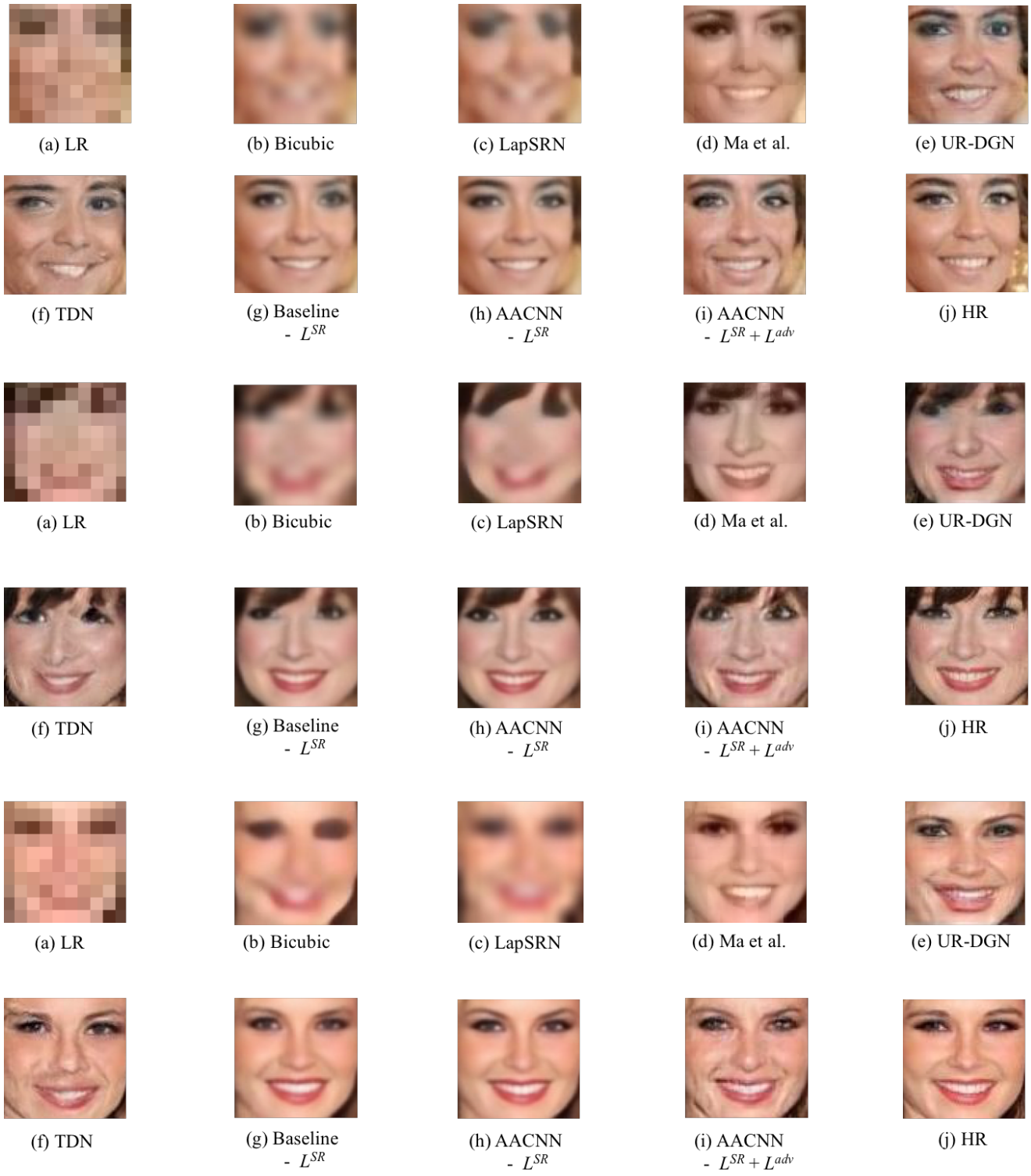

Figure 4. Comparison with the state-of-the-art methods on hallucination local test dataset which is heavy makeup on "face" part. (a) Low-resolution inputs images. (b) Bicubic interpolation. (c) LapSRN [1]. (d) Ma et al. [2]. (e) UR-DGN [3]. (f) TDN [4]. (g) Baseline - L^{SR}. (h) AACNN - L^{SR}. (i) AACNN-$L^{SR} + L^{adv}$. (j) High-resolution images.