

REVIEW

# Treating the Latin American Aesthetic Patient: A Review

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Abstract: The rich and diverse heritage of Latin American people contributes to a large variety of physical features, which translates to a patient population with a range of motivations for seeking cosmetic procedures and unique perspectives that influence their aesthetic preferences. As there is no one standard of beauty, it is important for physicians to understand the various factors that influence their patients' perceptions of beauty and desires to seek cosmetic treatment, especially because patient preference may differ from the physician perspective. Physicians in Latin America must consider the demographic, ethnic, and cultural factors that influence their patients to ensure culturally sensitive treatment approaches, natural-looking results, and patient satisfaction. This review includes a discussion of published literature, combined with the expert opinion of the authors, to provide a detailed description of the elements that impact aesthetic perceptions of patients living across the Latin American diaspora and highlights important gaps in research for future studies to address.

**Keywords:** aging, beauty, ethnicity, Hispanic, Latino, Latinx, physiology

#### Introduction

Latin America, the region composed of Central and South America, Mexico, and some Caribbean islands, maintains significant prominence in the aesthetics market. Globally, Latin America is a major consumer of aesthetic procedures. The 2021 International Society of Aesthetic Plastic Surgery International Survey on Aesthetic/Cosmetic Procedures Performed found Brazil, Mexico, Argentina, and Colombia to constitute 4 of the top 10 countries ranked by total number of aesthetic procedures, with Brazil ranking number 2 worldwide in combined total surgical and nonsurgical procedures. Research on patient and physician perspectives indicates that this trend will continue into the future; data from the 2022 Allergan Aesthetics HCP and Patient Research survey showed that in Brazil, Argentina, Chile, Mexico, and Colombia, most patients intended to increase their applications of injectable treatments (ie, onabotulinumtoxinA, hyaluronic acid fillers, and collagen biostimulator fillers [Data on file; Allergan Aesthetics, an AbbVie Company]). Healthcare professionals anticipate notable market growth for injectable treatments in Latin America, especially for lip treatment. In addition to its significant impact on the aesthetics market via consumerism, Latin America is home to internationally known leaders in aesthetic medicine and has a notable impact on global trends and innovations in clinical aesthetics practice.

Latin America encompasses an exceedingly large geographic area composed of many regions, each with a unique and complex history of migration and miscegenation. This rich heritage contributes to great diversity in the physical features of Latin American people, typically classified as Hispanic/Latino ("Hispanic" referring to people whose first language is Spanish or who are descended from Spanish-speaking populations, and "Latino" referring to people who are from or who are descended from populations in Latin America), which translates to a patient population with a range of motivations for seeking cosmetic procedures and unique perspectives that influence their aesthetic preferences. There is no one

standard of beauty; published literature indicates that perceptions of beauty are molded by cultural, social, and geographic factors.<sup>2</sup> It is important for physicians to understand the various factors that influence their patients' perceptions of beauty and desires to seek cosmetic treatment, especially because patient preference may differ from the physician perspective.<sup>3,4</sup>

Healthcare professionals in Latin America must consider the influence ethnic and cultural factors have on their patients to ensure culturally sensitive treatment approaches and patient satisfaction. However, there is a need for more published literature describing the diversity of aesthetic perspectives in Latin America, as few studies have addressed the aesthetic features, concerns, and treatment goals of this population. The objective of this review is to leverage not only the published literature, but also the extensive clinical experience of the authors to provide a detailed description of the elements that impact aesthetic perceptions in Latin American patients, including the aesthetic preferences of people living in Latin American countries and the positive impact of aesthetic treatments on these individuals' quality of life and self-confidence.

## **Genomic Diversity**

## Miscegenation/Migration Patterns in Latin America

No single source of genetic ancestry gave rise to the modern Latin American population. Each country has a unique history of migration and admixture among different groups, mainly involving different populations of Africans, Europeans, and Native Americans. Genetic and anthropological research indicates that early Native American populations varied in density across the Americas, a phenomenon that is reflected in the variable genetic representation of Native American genetic traits in modern-day Latin Americans. Over time, the Native American populations declined as waves of migration from different regions in Africa and Europe led to admixture with immigrants (Figure 1). These interactions varied geographically; for example, during the Iberian "Conquest", male migrants from Iberia admixed with Native Americans and Africans in settlement regions and coastal areas. Waves of European immigrants later entered the population and added to the gene pool, with the most notable influence being the Treaty of Tordesillas in 1494. This treaty divided the Americas by a north-south meridian and established that territories to the west belonged to Spain and territories to the east belonged to Portugal, leading to the high degree of Portuguese ancestry in Brazil and Spanish ancestry in central and western South America. Mestizos are a notable demographic in Mexico, with heritage from European colonization that contributed to admixing among Spaniards, Native Americans, and Africans. These historical events illustrate, at a very high level, how immigration, politics, and social behaviors led to a rich and varied genetic history across the different Latin American countries.

Even within individual countries, a high degree of ancestral variation exists.<sup>5</sup> For example, Brazilians have a high level of European (especially Portugal and western Spain), African, and Native American ancestry, and each demographic shows a unique geographic distribution across the country.<sup>5,7</sup> Chileans have the least ancestral variation, with uniform levels of European and Native American ancestry and low levels of African heritage.<sup>5</sup> Argentinians have no African heritage; instead, their ancestry is primarily European (Spain, Italy, Eastern Europe) with some Native American ancestry in the northwestern part of the country.<sup>7</sup> Colombians have high levels of African ancestry along the coast, with more European ancestry in more central locations, and scattered pockets of Native American ancestry.<sup>5</sup> Mexicans have a high degree of Native American ancestry in the center and south, while more northern populations have more European ancestry, and African ancestry is low.<sup>5</sup> In Peru, Native American ancestry is also high, and African ancestry is less common, with European ancestry prevalent in the northern and central areas of the country.<sup>5</sup> Although early migration patterns set the background for Latin American genomic diversity, it is important to note that these are broad generalizations, and demographics vary and continue to evolve on the micro-level as modern-day humans move within and between different countries.

# Anatomical Features Specific to Ethnic Groups

Latin American patients present with a large diversity of anatomical features stemming from variation in ancestry, and thus diversity in one country or region varies greatly from that at any other given location. This variation in ancestry

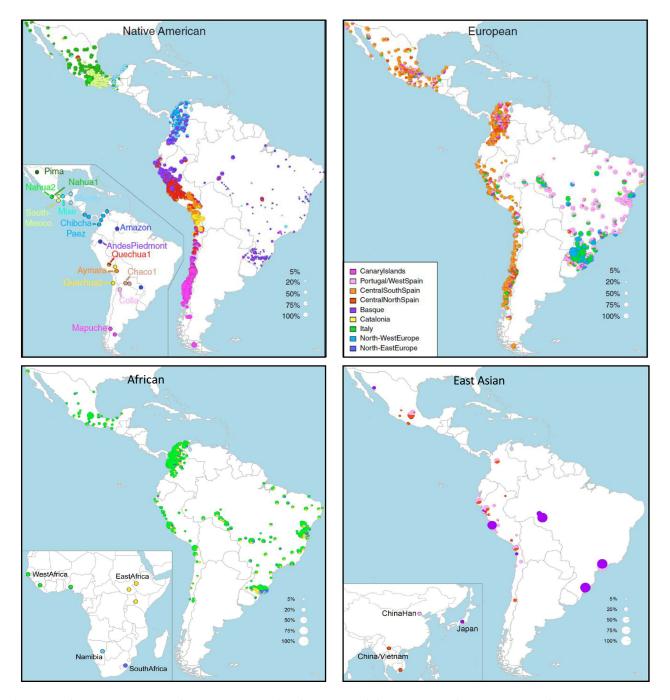


Figure I Latin American genomic diversity. Adapted with permission from Chacón-Duque J-C, Adhikari K, Fuentes-Guajardo M, et al. Latin Americans show wide-spread Converso ancestry and imprint of local Native ancestry on physical appearance. *Nature Commun.* 2018;9(1):5388. This article is licensed under a Creative Commons Attribution 4.0. <a href="https://creativecommons.org/licenses/by/4.0/">https://creativecommons.org/licenses/by/4.0/</a>.

gives rise to notable differences in features, such as skin color, bone structure, and tissue and fat distribution. <sup>5,7,9–13</sup> Despite the importance of understanding these differences, literature providing a detailed description of Latin American anatomical features is limited.

One of the most variable features among Latin American patients from different geographic regions who seek aesthetic treatment is skin color, with representation of Fitzpatrick skin types II through V.<sup>14</sup> However, limited studies document the variation in skin type among Latin Americans living in individual Latin American countries. In Brazil, skin pigmentation traits are reported to be influenced by Portugal and western Spain ancestry.<sup>7</sup> In an assessment of patients in

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a single Puerto Rican aesthetics practice, the majority were evenly distributed across Fitzpatrick skin types II, III, and IV.9

Facial morphology varies with ancestry, and Latin Americans display a range of unique facial features. Overall, compared with other global demographic groups, Latin Americans have increased bizygomatic distance, bimaxillary protrusion, broader noses, rounder faces, and more receded chins, but these features may vary depending on the individual patient's heritage. 10,15 For example, Argentinians do not have increased bizygomatic distance or broader noses, owing to their primarily European ancestry. Studies documenting the differences in facial morphology among Latin Americans are limited. In one study, Caribbean Americans, Central Americans, and South Americans exhibited different facial angles and distances between features. 10 In another, Latin Americans had notable diversity in nasal shape, with variation in the location of nasal breakpoints and the horizontal nasal axis between patients of Caribbean. Central American, or South American descent. 11,12 Native American ancestry can also influence nose shape; individuals with Mapuche heritage have less protrusion, a broader nose tip angle, and a flatter, wider nose.<sup>7</sup>

Other anatomical features have been traced to different ethnic groups represented among the Latin American population. For example, people with a higher degree of European ancestry tend to be taller and have reduced eye fold; smaller faces; curlier hair; lighter pigmentation in skin, eyes, and hair; and more frequent male pattern baldness.<sup>5</sup> People with African ancestry tend to be taller, have more skin pigmentation, and have curlier hair.<sup>5</sup> The average Mexican patient has a broad face with prominent malar eminence, a broad nose, widened alar base, short columella, horizontally oriented nostrils, and thick nasal skin. 10,12 White Brazilian men exhibit a more prominent nose and a more protruded upper lip compared with White men from the United States (US), while White Brazilian women have a smaller nose and more retruded lower face compared with White women from the US.<sup>13</sup> Together, these data illustrate the range of morphologic diversity among patients from different Latin American regions. Thus, there is no one type of "Hispanic/ Latino" patient, as no single combination of features characterizes a patient from Latin America. The lack of data highlights important gaps in knowledge for future research to explore.

Examples of Latin American patients representing diversity and miscegenation in the Brazilian population are shown in Figure 2, which shows 3 patients of mixed and differing ancestry who visited a dermatology clinic in São Paulo, Brazil. Patient backgrounds are African and White, Native American and African, and African.

#### **Aesthetic Interests**

## Motivations and Deterrents

People in Latin America report a variety of motivations for seeking aesthetic treatment. In a multinational survey, individuals from Colombia said they sought cosmetic treatment primarily due to dissatisfaction with their appearance or to improve their confidence. <sup>16</sup> Of the Colombian respondents, almost all (97%) knew at least 1 person who had undergone a cosmetic procedure. 16 In a separate study, Hispanic and Latin American women in the US reported seeking treatment to look good for their age, to look less tired, and to improve facial lines/wrinkles/signs of aging and pigmentation issues. 17 In previous research published in 1998, Latin American women in the US reported a desire to be taller, thinner, and to have longer hair. 18

Thus, in the past, Latin American women living in the US may have experienced a transformation in their aesthetic goals to the White "ideal", while more recently, with the increase in population diversity, the aesthetic goals of Latin American women living in the US may have shifted to achieving natural results, enhancing personal features, and understanding the uniqueness of each individual. For example, the personal experience of one author (PEG) in private practice in Mexico suggests that, unlike in the past, Latin American women now prefer to keep their natural features, such as voluminous lips and high cheeks in the malar area.

It is important for physicians to understand deterrents to aesthetic procedures to maintain sensitivity to the barriers their patients must overcome and to provide support and education to help patients address any concerns. Data from the Allergan Aesthetics HCP and Patient Research survey found that treatment cost was the leading barrier to receiving injectable treatment, followed by fear of potential side effects (among patients in Chile, Colombia, and Mexico). In the multinational survey, patients from Colombia were deterred from seeking treatment due to lack of money, fear of



Figure 2 Examples of Latin American facial aesthetics. Clinical images illustrating facial characteristics seen in a Latin American aesthetics practice in São Paulo, Brazil. These patients exhibit more rounded facial shapes with lip proportions of 1:1. Images courtesy of A.R. Trindade de Almeida.

invasive procedures, and fear of looking frozen.<sup>16</sup> In another study, Hispanic/Latin American patients in the US listed cost, safety concerns, and injection concerns among the barriers to receiving cosmetic treatment.<sup>17</sup> These data highlight an opportunity to educate patients regarding safety, pain control, and possible treatment outcomes.

## Perceptions of and Genetic Differences in Aging

Anatomical structures dictate the effects of aging, which, as described in the previous section, vary greatly among patients from different Latin American countries. Few studies describe age-related changes in specific anatomical features of different Latin American populations. In one report describing Hispanic/Latino patients in the US, the features of aging were noted to include increased glabellar supraorbital prominence, superior concavity, shadowing of the forehead, orbital bone resorption, descent of the lateral brow, and appearance of a double chin. <sup>14</sup> Variations in skin color across populations translate to a variety of pigmentation changes that occur as different populations age: Black, Hispanic, and Asian women, and women with Fitzpatrick skin types V/VI, self-report less severe facial aging compared with White women and women with skin phototypes I/II or III/IV, respectively.<sup>3</sup> Melasma and hyperpigmentation are common among patients with Latin American heritage, though estimates of prevalence vary. 19-21 According to a study that included women from the US, Canada, United Kingdom, and Australia, Hispanic women begin to report advanced facial aging around 40 years of age, with complaints of nasolabial folds. Other features, including upper facial lines, loss of lip fullness, and oral commissures, begin to be more bothersome at 50 years of age, and midface volume loss and perioral lines increase in severity around 60 years of age (Table 1).3 Notably, perceptions of aging differ across populations; only 15% of surveyed Colombians considered wrinkles to be incompatible with aging gracefully, while crow's feet and forehead lines were listed among the most bothersome features for Latin American patients in the US. 16,17 In Mexico, one author's (PEG) experience in private practice has identified other patient concerns, including the appearance of spots related to sun exposure, loss of skin hydration, and less glowing appearance of the skin.

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Table I Common Age-Related Changes to Facial Features in Latin Americans

Age (y)	Feature
20–29	Uneven skin tone
30–39	Dermatosis papulosa nigra, melasma, tear troughs
40-49	Nasolabial folds, forehead lines, glabellar lines, lateral periorbital rhytids, seborrheic keratoses, solar lentigines
50–59	Lower eyelid fat pad protrusion, marionette lines, loss of lip volume
≥60	Perioral lines

#### Areas of Aesthetic Interest

Variation in aesthetic preferences also exists among Latin American countries, reflecting local geographic and cultural factors and influenced by broadcast and social media, and has been documented in several studies. A comprehensive review found variations in standard proportion preferences to be dependent on country, ethnic background, and culture.<sup>22</sup> highlighting cultural factors in influencing desired aesthetic outcomes. Two global surveys assessing aesthetic ideals, treatment expectations, and treatment experiences found that Colombians ranked eyes, smile, lips, nose, and hair among the most important facial features for male and female beauty, and listed nose, skin texture, hair, smile, and skin tone among the top features they would like to change. 16 In another global survey of 14,584 aesthetically conscious respondents (including 611 from Brazil and 609 from Mexico), respondents listed top aesthetic concerns as crow's feet lines, forehead lines, glabellar lines, under-eye bags or dark circles, desire to add volume and contour face shape, and skin issues, although that study did not stratify outcomes by country.<sup>23</sup> Among Puerto Rican patients in a single practice, the most popular treatment areas were the glabella, lateral canthus, forehead, and depressor anguli oris. 9 In a survey of Hispanic/Latino women in the US, respondents listed the most bothersome areas as sagging underneath the chin, undereye/tear trough area, crow's feet lines, and forehead lines. These data underline the importance of understanding the desires and preferences of the local patient population, as what is popular in one region may not be considered favorable elsewhere. In addition, the impact of social media on setting trends regarding perceptions of beauty, motivation to pursue aesthetic treatment, and individuals' self-esteem should not be underestimated.

## **Concepts of Beauty**

Latin Americans have unique perspectives on beauty compared with other global demographics. Some studies have attempted to capture beauty standards across different countries. In one study performed by Ipsos, Brazilian women defined beauty as good skin, good health, and a good figure; Mexican women described beauty as smooth skin, clean, healthy, and unique. In another analysis that evaluated models from cosmetics advertisements as a proxy for beauty standards, tanned models were preferred in Latin America.<sup>24</sup> Brazilian women have indicated a preference for greater chin projection than Brazilian men, whereas in other studies investigating lip preferences, Brazilian men preferred greater female lip projection than Brazilian women. Hispanic Americans preferred lip protrusion of a mean of  $-3.28 \pm 2.26$  mm (posterior) from Ricketts' E-line, whereas Mexican Americans preferred less protrusive upper and lower lips compared with White Americans, <sup>25,26</sup> Relative to North Americans, Europeans, and Asians/Middle Easterners, Latin Americans preferred a large lip size.<sup>4</sup> Larger lips were also preferred for cosmetics advertisements in Latin America compared with markets in Asia.<sup>24</sup>

Lip, nose, and other facial proportions reportedly considered "ideal" differ between White patients and patients of other ethnicities.<sup>2,4</sup> Thus, additional studies are required to understand facial proportions considered "ideal" by patients of different ethnic and cultural backgrounds to help support aesthetic physicians in facial assessment aiming to maintain the balance of the face and in proposing a treatment plan to enhance patient satisfaction while preserving each individual patient's unique features.

# Assessing and Treating Latin American Patients

Especially in aesthetics, it is important for physicians to respect individuality and understand that there is no one standard of beauty; diversity should be celebrated. Physicians should take the time to determine each individual patient's goals to ensure both parties agree on treatment goals and set reasonable expectations. By gaining insight into the ethnic

background of their patient population, physicians will be better equipped to understand their patients' preferences, priorities, underlying anatomy, and aging specifics. Physicians should also be aware of their own biases to avoid unconsciously imposing them onto patients who have their own concepts of beauty.<sup>27</sup>

Data from patients in Latin American countries support the idea that a patient-centric approach to healthcare supports positive experiences and patient satisfaction. Patients from Colombia reported that an approachable physician who listens to all concerns is an important contributor to the overall experience of an aesthetic medical procedure. Puerto Rican patients in a single clinic often embraced the aesthetic recommendations of their physician after sharing their specific treatment concerns. A culturally aware treatment approach helps physicians ensure equitable care, foster patient engagement, and respect and enhance a person's identity. In addition, although preferences and genetic backgrounds may differ, some aspects of treatment are applicable to any patient, such as addressing the signs of aging in typical locations (eg, midface bone structure loss, forehead lines, etc).

#### **Clinical Cases**

Case examples demonstrating the effects of nonsurgical treatment for some of the common aesthetic concerns of patients in Latin America are shown in Figures 3–5. All patients have provided written informed consent for their photos and data to be published.

### **Conclusion**

Latin American patients represent one of the largest, fastest-growing non-Caucasian groups seeking cosmetic procedures and are a diverse population with a rich and complex heritage and unique and variable opinions on beauty standards.

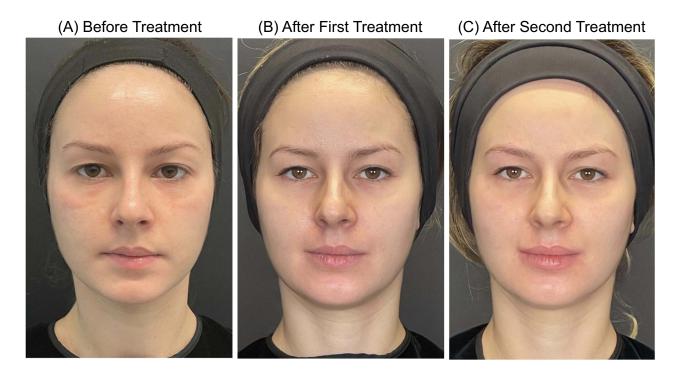


Figure 3 Case example of a White Brazilian woman aged 29 years who presented with concerns of a tired appearance. (A) Aesthetic assessment included lack of projection of the eyebrows, in which the medial part was located below the orbital rim, as well as slight malar volume loss and tear trough deformity, which was more noticeable on the right side, and a slight asymmetry of her lips, with less volume observed on the right side. Other aesthetic observations included good lip volume and contour with a 1:1 proportion between the upper and lower lip. (B) For her first treatment, she received hyaluronic acid filler (Juvéderm Voluma; Allergan Aesthetics, an AbbVie Company) injections to the retro-orbicularis oculi fat (0.15 mL to each side) and medial zygoma (0.2 mL to each side), and 0.1 mL each to the right canine fossa, right lateral zygoma, and the nasal dorsum. She also received Juvéderm Volite (Allergan Aesthetics) to the right side of both lips. Fifteen months after the first treatment, she looked less tired and more awake, with eyes that appeared to open wider, eyebrows that were more projected, and no visible shadows in the inferior periocular area. In addition, her lips were more symmetrical, with the corners of her mouth elevated. (C) She received a second treatment with Juvéderm Voluma on her eyebrows (0.35 mL each side), neach side), neach side), lateral zygoma (0.2 mL each side), left (0.1 mL) and right (0.4 mL) malar areas, and right upper and lower lips (0.3 mL total volume) at the corner of her mouth. Immediately after the second treatment, her eyes appeared more open and her eyebrows more projected compared with the results of the first treatment. In addition, there were no visible shadows in her malar region, her nose looked thinner and longer, her lips were more symmetrical and naturally plumped, and the corners of her mouth were elevated. Images courtesy of A.R. Trindade de Almeida.

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# (A) Before Treatment

# (B) Immediately After Treatment





Figure 4 Case example of a Mexican woman aged 27 years who expressed a desire to look less tired, thinner, and more attractive. (A) After aesthetic assessment, treatment goals were determined to be enhancement of the mandibular area, slimmer face appearance, more attractive lips while preserving their volume (without exaggeration), and a more open orbicular appearance by improving the temporal and malar areas. She was treated with Juvéderm Voluma (Allergan Aesthetics) in her zygomatic arch (0.3 mL each side), anteromedial cheek (0.2 mL each side), lateral lower cheek (0.3 mL each side), and anterior and posterior temple (0.2 mL each side). In addition, Juvéderm Volux (Allergan Aesthetics) was placed into the mandibular angle (0.1 mL each side) and prejowl area (0.2 mL each side) as well as the anterior chin (0.2 mL each side), chin apex (0.3 mL), pogonion (0.2 mL), and labiomental angle (0.5 mL). Her lips were treated with Juvéderm Volift (1 mL; Allergan Aesthetics). (B) Photo shows the patient's appearance immediately after treatment (ie, same day). Also, the patient reported that she had more confidence, felt more attractive, and will be more focused on her health and self-wellness in the future. Images courtesy of P.E. Garcia.

Extrinsic and intrinsic factors, such as ancestry, environment, and ethnic, cultural, and social factors, influence a person's physical appearance, affect the dynamics of aging, contribute to aesthetic desires, and dictate a person's perception of beauty. Physicians should consider these factors when assessing and treating patients in Latin America to achieve natural-looking results that align with the patient's individual characteristics and preferences. While this review highlights what is documented in the literature regarding aesthetic concerns for Latin American patients and significant gaps in knowledge, future research should aim to further explore these topics.

# **Data Sharing Statement**

These clinical trial data can be requested by any qualified researchers who engage in rigorous, independent, scientific research, and will be provided following review and approval of a research proposal, Statistical Analysis Plan (SAP), and execution of a Data Sharing Agreement (DSA). Data requests can be submitted at any time after approval in the US and Europe and after acceptance of this manuscript for publication. The data will be accessible for 12 months, with possible extensions considered. For more information on the process or to submit a request, visit the following link: <a href="https://vivli.org/ourmember/abbvie/">https://vivli.org/ourmember/abbvie/</a> then select "Home".

# **Acknowledgments**

Medical writing support was provided to the authors by Jenna Bassett, PhD and Stephanie M. Leinbach, PhD of Peloton Advantage, LLC (an OPEN Health company) and was funded by Allergan Aesthetics, an AbbVie Company.



Figure 5 Case example of a Brazilian woman aged 50 years of mixed ancestry (indigenous and European [Italian and Portuguese] descent). (A) The patient presented with concerns of a tired appearance and laxity, with loss of definition in the lower third of her face. She received treatment with onabotulinumtoxinA (Botox; Allergan Aesthetics) in the upper third of her face. She was also treated with a hybrid injectable containing calcium hydroxyapatite microspheres suspended in a hyaluronic acid gel (HArmonyCa; Allergan Aesthetics) in the posterior zygoma and premasseteric and posterior mandible (I.25 mL each side), and Juvéderm Voluma (Allergan Aesthetics) in the nasolabial fold (0.25 mL each side), lateral chin (0.25 mL each side), chin apex (0.2 mL), and prejowl area (0.4 mL each side). (B) 90 days after treatment, the patient showed improvements in the periorbital area, including better eyebrow positioning, reduction in dark circles, and a more open eye appearance. In addition, her face had a slimmer appearance with improvements in lower facial contouring and delicate chin elongation and projection. Skin quality improvement was also noticeable. Images courtesy of S. Zimbres.

#### **Author Contributions**

All authors made a significant contribution to the work reported, whether that is in the conception, study design, execution, acquisition of data, analysis and interpretation, or in all these areas; took part in drafting, revising, or critically reviewing the article; gave final approval of the version to be published; have agreed on the journal to which the article has been submitted; and agree to be accountable for all aspects of the work.

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## **Funding**

Allergan Aesthetics, an AbbVie Company, funded this study and participated in the study design, research, analysis, data collection, interpretation of data, reviewing, and approval of the publication. All authors had access to relevant data and participated in the drafting, review, and approval of this publication. No honoraria or payments were made for authorship. Medical writing support was provided by Jenna Bassett, PhD and Stephanie Leinbach, PhD of Peloton Advantage, LLC (an OPEN Health company) and funded by Allergan Aesthetics, an AbbVie Company.

#### **Disclosure**

R Banegas: Speaker for Allergan Aesthetics, an AbbVie Company.

PE Garcia: No conflicts.

C Martinez: Speaker for Allergan Aesthetics, an AbbVie Company, Merz, and BTL.

S Zimbres: Medical consultant and speaker for AbbVie/Allergan Aesthetics, Johnson & Johnson, Neauvia, NAOS, and L'Oréal.

AR Trindade de Almeida: Speaker, consultant, and researcher for Allergan/AbbVie and Merz and a consultant for Galderma.

J Frolik and C Cazerta de Paula Eduardo: Full-time employees of AbbVie and may hold AbbVie stock.

The authors report no other conflicts of interest in this work.

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