L'ORÉAL

L'Oréal launches AI-powered skin diagnostic based on scientific research in skin aging

Clichy, 19 February 2019 – L'Oréal's recently acquired Augmented Reality and Artificial Intelligence entity, ModiFace, and L'Oréal Research & Innovation, have announced the launch of a digital skin diagnostic for consumers based on 15 years of scientific research on skin aging by L'Oréal R&I evaluation teams.

This new technology is based on an Artificial Intelligence-powered algorithm developed by ModiFace and nourished by L'Oréal's skin aging expertise and photo database. Using deep learning, the algorithm has been trained on 6000 clinical images from L'Oréal's R&I evaluation and knowledge studies conducted with Skin Aging Atlases[1], and then a new model has been created on over 4500 smartphones selfies for 3 groups of women (Asian, Caucasian and Afro-American) in 4 different lighting conditions. The results, which were developed with dermatologists, achieved a high level of skin assessment precision[2]. Accurate results were obtained with different facial expressions and photo taking conditions (light, phone position) similar to those used by consumers.

L'Oréal's *Skin Aging Atlases* are the first exhaustive atlases of facial aging, addressing visual aging signs. Studies for *Skin Aging Atlases* were carried out in France, China, Japan, India and United States on a total of 4000 women and men aged from 20 to 80 years. *Skin Atlases* allow to evaluate or predict the general aging of the face and are used today for clinical evaluations of cosmetic or dermatological treatments.

The first application of L'Oréal's new skin diagnostic will be **Vichy SkinConsult[AI]** that launched in January 2019 in Canada and will be rolled out on the brand's websites worldwide later this year. The **SkinConsult[AI]** will provide women a tailor made diagnostic in 3 easy steps:

- Women are invited to take or upload a selfie on the brand's website.
- The technology detects seven aging signs: under-eye wrinkles, lack of firmness, fine lines, lack of radiance, dark spots, deep wrinkles and pores. The aging signs are analyzed and the women discover their personalized skin aging matrix, their skin strengths and priorities to act on.
- Each woman receives a tailored made product routine to address her specific skin priorities.

Lubomira Rochet, Chief Digital Officer of L'Oréal, said: *"With the acquisition of ModiFace, we have started a second phase of L'Oréal's digital transformation, focused on reinventing the beauty experience through technologies such as voice, AR and AI. We believe that services will be the new gateways for discovering our brands and products. After virtual make up try on, virtual hair color try on, online beauty consultations powered by AR, L'Oréal and ModiFace are proud to unveil the first skin care diagnostic authentically powered by AI and science."*

Myriam Bekkar-Schneider, Vichy General Manager, said: *"As #1 anti-aging brand in European pharmacies, we are proud to present SkinConsult[AI], a true scientific milestone developed with dermatologists. For the first time, this technology allows all women to obtain a personal diagnostic to better understand their skin aging and to find a skincare routine tailor-made for them."*

About L'Oréal
L'Oréal has devoted itself to beauty for over 100 years. With its unique international portfolio of 36 diverse and complementary brands, the Group generated sales amounting to 26.9 billion euros in 2018 and employs 82,600 people worldwide. As the world's leading beauty company, L'Oréal is

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1 Skin Atlases published in 5 volumes: Roland Bazin, Frédéric Flament, Huixia Qiu : *Skin Aging Atlas. Volume 5, Photo-aging Face & Body.* October 2017; Roland Bazin, Frédéric Flament, Virginie Rubert: *Skin Aging Atlas. Volume 4, Indian Type.* June 2014; Roland Bazin, Frédéric Flament, Franck Giron: *Skin Aging Atlas. Volume 3, Afro-American type.* May 2012; Roland Bazin, Frédéric Flament : *Skin Aging Atlas. Volume 2, Asian type.* November 2010; Roland Bazin: *Skin Aging Atlas Volume 1, Caucasian Type.* October 2007.

2 Ruowei Jiang; Irina Kezele; Alex Levinshtein; Frederic Flament; Jingyi Zhang; Eric Elmoznino; Junwei Ma; He Ma; Jerome Coquide; Vincent Arcin; Esohe Omoyuri; Parham Aarabi: *A new procedure, free from human assessment, that automatically grades some facial skin structural signs. Comparison with assessments by experts, using referential atlases of skin aging.* Published online in: International Journal of Cosmetic Science. 21 January 2019.

present across all distribution networks: mass market, department stores, pharmacies and drugstores, hair salons, travel retail, branded retail and e-commerce.
Research and innovation, and a dedicated research team of 3,885 people, are at the core of L'Oréal's strategy, working to meet beauty aspirations all over the world. L'Oréal's sustainability commitment for 2020 "Sharing Beauty With All" sets out ambitious sustainable development objectives across the Group's value chain.
For more information: http://mediaroom.loreal.com/en/

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