

## **ORAL PRESENTATION ABSTRACT**

### **ACOS23O-001: Using Autologous Human Hair Follicular Stem Cells for Male Pattern Hair Loss (MPHL) & Female Pattern Hair Loss (FPHL) in Asian Populations.**

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The utilization of human stem cells in treating Androgenetic Alopecia holds considerable promise. Several sources of autologous human stem cells have been employed in the treatment of Male Pattern Hair Loss (MPHL) and Female Pattern Hair Loss (FPHL). One of the recent discoveries involves the extraction of autologous human stem cells from human hair follicles. Human hair follicles serve as a well-established niche for adult stem cells, housing Mesenchymal stem cells in the dermal sheath and the bulge, which include epithelial and melanocytic stem cells. Stem cells located in the hair bulge, a distinct structure within the lower permanent part of hair follicles, have the capability to generate the interfollicular epidermis, hair follicle structures, and sebaceous glands. A novel method has been developed for isolating human adult stem cells via mechanical centrifugation of punch biopsy samples taken from human hair follicles, without the need for culture conditions. The punch biopsy area typically encompasses the mastoid process along the bilateral hairline demarcation. Human follicle stem cells (HFSCs) derived from this method have shown promise in enhancing hair density in patients affected by MPHL in Norwood-Hamilton classification stages 2-5, FPHL in Ludwig classification stages 1-3, and in certain cases of Alopecia Areata. Studies indicate that these isolated cells are capable of improving hair density in patients affected by Androgenetic Alopecia (AGA) and, in some cases of Alopecia Areata.

**Keywords:** Androgenetic Alopecia, Autologous Human Stem Cells, Male Pattern Hair Loss, Female Pattern Hair Loss