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Table SI. Quantitative evaluation of AGA transverse scalp sections before and after transplantation and treatment

The table documents the interindividual variability and absolute data as well as the effect of transplantation alone versus transplantation + treatment. These experiments were published previously (10, 11) and the tissue samples and sections from these studies were re-analysed for the current study. In the previous studies, the stimulatory effect on hair growth of PRP and MXL was tested on human mpAGA xenotransplants on SCID mice in comparison to non-activated PRP and vehicle (= control groups). Quantitative histomorphometry was performed on H&E staining paraffin sections in standardized, well-defined reference areas (2.2 mm²) by experienced, blinded observers, counting at least three reference areas each on three non-consecutive sections, presented randomly to the blinded observer(s). Specifically, HF structures were counted in an area of 2.2 mm². T, V and intermediate HFs were distinguished by measuring the hair shaft at the infundibulum level. T HFs were quantitatively defined as having a shaft diameter of at least 0.06 mm, while V HFs were defined as less than 0.03 mm in diameter with lack of melanin and medulla. “Intermediate HFs” show characteristics between V and T HFs, are less pigmented and smaller than T HFs, and have a diameter of 0.03-0.06 mm. The T/V ratios before and after transplantation and treatments versus control xenotransplants clearly demonstrate that the reported changes following treatment were indeed due to PRP or MXL therapy, rather than to transplantation-induced wounding phenomena.

Number of V, intermediate and T HFs in PRP treated mice (n=5 mice, 3 xenotransplants per mouse) not-activated PRP (control, n=5 mice, 3 xenotransplants per mouse), MXL (n=5 mice, 3 xenotransplants per mouse) and vehicle (n=4 mice, 3 xenotransplants per mouse).

Statistical comparison was performed on 10 scalp skin donors before transplantation and 30 xenografts after transplantation for both treatment groups (PRP and minoxidil), as well as 30 xenografts for the control groups (Non-activated PRP and vehicle).

^ = average number of V HFs following treatment vs vehicle (p<0.05) & average number of intermediate HFs following treatment vs vehicle (p<0.02) (unpaired Student’s t-test)

@ = average number of terminal HFs: Following treatment vs vehicle control p<0.05

= T:V HF ratio following treatment vs vehicle (p<0.02) (Mann-Whitney test).

Table SI. Quantitative evaluation of AGA transverse scalp sections before and after transplantation and treatment

Age of each donor	Treatment	Before transplantation				After transplantation										
		V	I	T	T/V	^V	^I	@T	#T/V	% T/V ratio before and after transplantation	Non-activated PRP	^V	^I	@T	#T/V	% T/V ratio before and after transplantation
28	PRP Once-monthly I.D. autologous PRP injections for 4 months	1	1	3	3:1	1.3±0.5	2.3±0.7	8±2	6:1	+100		Non-activated PRP	2.2±0.1	1.2±0.2	5±0.7	2.5:1
37		2	8	9	4.5:1	1±1	3±0.2	9±2.6	9:1	+100	1±0.5		6±0.7	6.1±0.6	6:1	+33
48		2	7	7	3.5:1	1.6±0.5	1±0.2	10±3.6	6:1	+71	3.3±0.7		8±0.9	6.9±0.9	2.3:1	-35
26		1	10	6	6:1	1.3±0.5	1.6±0.7	8±1	6:1	0	1±0.2		4.3±0.4	5.3±0.8	5:1	-17
30		3	6	8	2.6:1	1±0.0	2.3±0.2	7.6±4	7.6:1	+192	2±0.3		7.2±0.5	8.7±0.9	4.5:1	+73
Mean		1.8±1	6.4±3	6.6±2	3.9±1	1.2±0.2	2±0.8	8.5±1	6.9±1	92	1.8±0.8		5.2±2.7	6.4±1.6	4±1.6	7.4
34	Minoxidil Daily application of 5% topical minoxidil for 4 months	2	5	4	2:1	1.3±1.1	2±0	6.6±3	5:1	+150	Vehicle	1.2±0.2	6±0.9	3.2±0.3	3:1	+33
24		0	5	1	1:0	0.6±1.1	2.3±0.2	5.3±2	8.8:1	+120		1.1±0.1	4±0.3	1.2±0.4	1:0	0
30		2	6	4	2:1	1.3±0.5	3.3±0	6±1	4.6:1	+130		2.7±0.8	3.3±0.5	7.8±1.4	2.6:1	+30
36		2	6	5	2.5:1	0.6±1.1	2.4±1.1	5.5±2	9:1	+220		1±0.3	5±0.2	3±0.5	3:1	+20
41		2	6	6	3:1	0.6±0.5	3.3±0.4	6±1.4	10:1	+300		1.9±0.2	5±0.7	5.2±0.9	2.5:1	-17
Mean		1.6±1	5.6±0.5	4±2	2±1	1±0.4	2.6±0.6	6±0.5	7.5±2.4	184		1.6±0.9	4.6±0.1	4.4±2.5	2.8:1	13.2

V- vellus HF ; I- Intermediate HF ; T- Terminal HF ; T/V- Terminal/Vellus ratio

Table SII. Quantitative evaluation of AGA transverse scalp sections after transplantation and treatment

The table shows the quantification data of HFs after transplantation and treatment. HFs were counted in 2.2 mm² reference areas on H&E stained paraffin sections by blinded observers. Three reference areas on three non-consecutive sections were counted for each sample. HFs were classified as T, V or intermediate based on the hair shaft diameter and pigmentation at the infundibulum level. T HFs had a diameter of ≥ 0.06 mm and were pigmented and medullated. V HFs had a diameter of < 0.03 mm and lacked melanin and medulla. Intermediate HFs had a diameter of 0.03-0.06 mm and were less pigmented and smaller than T HFs. The quantification was performed on three xenotransplants from each scalp skin donor per treated group. Counting was performed on at least three reference areas each on three non-consecutive sections.

Supplementary Table 2: Quantitative evaluation of AGA transverse scalp sections after transplantation and treatment

Age of each donor	Treatment	Vellus			Intermediate			Terminal			Treatment	Vellus			Intermediate			Terminal		
		Xenograft on each mouse			Xenograft on each mouse			Xenograft on each mouse				Xenograft on each mouse			Xenograft on each mouse					
		1	2	3	1	2	3	1	2	3		1	2	3	1	2	3	1	2	3
28	PRP Once-monthly I.D. autologous PRP injections for 4 months	1,2,1	2,1,2	1,1,1	3,2,2	3,3,1	2,2,3	5,12,8	6,9,8	10,7,8	Non-activated PRP	2,2,2	2,2,2	3,2,3	1,1,2	1,1,1	1,1,2	5,5,4	5,5,6	6,4,5
37		0,2,0	1,2,1	0,0,3,1	3,3,2	3,3,3	3,3,3,3	12,8,10	8,4,11	12,7,10		0,2,1	1,1,1	1,1,1	5,6,6	6,5,7	6,7,6	6,6,6	7,5,6	6,6,7
48		2,2,1	2,2,1,2	1,1,2	1,1,1	1,2,1	1,1,1	14,6,9	7,9,13	13,5,14		4,3,4	3,3,3	4,2,4	10,8,8	8,8,8	8,7,7	7,8,6	6,6,8	8,7,6
26		1,2,1	2,1,1	2,1,1,1	2,3,1	1,1,2	1,2,2	7,9,8	6,9,8	9,8,8		1,1,1	1,1,1	2,1,1	5,4,4	4,4,5	4,5,4,4	4,5,5	5,5,7	5,6,6
30		1,1,1,1	1,1,1	1,1,1,1	2,2,2	2,2,3	2,2,2,3	13,3,5	8,9,7	2,10,12		3,2,2	2,2,2	2,2,2	7,7,8	8,7,7	7,7,7	9,9,7	8,9,9	9,8,10
34	Minoxidil Daily application of 5% topical minoxidil for 4 months	0,2,2	2,2,0	3,0,1	2,2,2	2,2,2	2,2,2	8,9,10	4,8,9	6,4,2	Vehicle	1,2,1	1,1,1	1,1,2	6,7,7	6,6,5	5,5,7	3,3,3	4,3,3	3,3,3
24		0,0,0	2,2,0	0,2,0	2,2,2	3,2,2	3,2,3	5,5,4	6,7,9	6,5,1		1,1,1	1,1,1	2,1,1	4,5,4	4,4,4	4,4,4	1,2,1	1,1,1	1,1,2
30		1,1,1,1	2,1,1	2,2,1	3,3,4	4,3,4	3,3,3	7,7,6	6,7,5	4,6,6		3,2,2	4,2,2	3,3,3	4,3,4	3,3,3	3,3,4	9,9,6	6,7,7	7,10,10
36		0,0,0,1	0,3,0	0,2,0	3,4,3	3,3,2	2,2,0	5,7,2	3,5,8	7,7,6		1,1,1	1,1,1	1,1,1	6,5,5	5,5,5	5,5,4	3,3,3	3,2,4	3,3,3
41		0,1,1	0,0,1	1,1,1	3,3,3	4,3,3	4,4,3	4,7,8	7,6,5	5,4,7		2,2,2	2,2,2	2,1,2	5,5,6	6,5,5	4,4,5	4,6,6	6,5,5	6,5,5