WHAT IS CLAIMED IS:

1. A composition for improving, increasing, or enhancing minoxidil response of a subject suffering from alopecia, the composition comprising:
an alkalizing agent and a sulfotransferase enzyme.

2. The composition of claim 1, wherein:
the composition is formulated as a topological composition, an oral composition, an injectable composition, or a transdermal composition; and/or
the composition is formulated as a drug, a nutritional supplement, or a cosmetic.

3. The composition of claim 1, wherein:
the composition includes minoxidil.

4. The composition of claim 1, wherein:
the composition includes minoxidil; and
the composition is formulated as a topological composition, an oral composition, an injectable composition, or a transdermal composition.

5. The composition of claim 1, wherein:
the alkalizing agent includes one or more of a bicarbonate, citrate, a loop diuretic, MOPS, BES, TES, HEPES, DIPSO, TAPSO, Acetamidoglycine, POPSO, HEPPSO, HEPPS, Tricine, Tris (tromethamine), Glycinamide, Glycylglycine, or Bicine, TAPS.

6. The composition of claim 1, wherein:
the sulfotransferase enzyme includes a human sulfotransferase enzyme and/or a non-human sulfotransferase enzyme.

7. The composition of claim 1, wherein:

the sulfotransferase enzyme includes one or more of a carbohydrate sulfotransferase, a galactose-3-O-sulfotransferase, a heparan sulfate 2-O-sulfotransferase, a heparan sulfate 3-O-sulfotransferase, a heparan sulfate 6-O-sulfotransferase, a N-deacetylase/N-sulfotransferase, a tyrosylprotein sulfotransferase, an uronyl-2-sulfotransferase, an estrone sulfotransferase, a chondroitin 4-sulfotransferase, SULT1A1, SULT1A2, SULT1A3, SULT1A4, SULT1B1, SULT1C2, SULT1C3, SULT1C4, SULT1D1P, SULT1E1, SULT2A1, SULT2B1, SULT4A1, or SULT6B1,

or the sulfotransferase enzyme includes OeST1.

8. The composition of claim 1, wherein:

the composition contains natural levels or extracts of minoxidil sulfotransferase enzymes, natural levels or extracts of phenol sulfotransferase enzymes, and/or natural levels or extracts of sulfotransferase enzymes derived from Populus trichocarpa, Populus x canescens, Salix sp., Arabidopsis thaliana, silver poplar (Populus alba), Simon's poplar (Populus simonii), S. purpurea, P. tremuloides, I. polycarpa, P. nigra, Oryza sativa, Salicaceae family, Poplars (Populus sp.), Idesia polycarpa - Japanese orange cherry, Potato (Solanum tuberosum), Cabbage (Brassica rapa), Populus trichocarpa (Black cottonwood), Salix Sp. (Willow tree), Cotton (Gossypium), Olea europaea L, Brassica napus, Apium graveolens, brassica oleracea, Saccharina japonica, Solanum tuberosum, and/or Black cottonwood; and

the natural levels or extracts of minoxidil sulfotransferase enzymes, phenol sulfotransferase enzymes, and/or sulfotransferase enzymes is/are present in amounts ranging from 1%-100% by weight.

9. A use of a composition comprising an alkalizing agent and a sulfotransferase enzyme in the manufacture of a medicament for improving, increasing, or enhancing minoxidil response of a subject suffering from alopecia.

10. The use of claim 9, wherein:

the composition is to be administered topologically, orally, via injection, or transdermally; and/or

the composition is to be administered as a drug, a nutritional supplement, or a cosmetic.

11. The use of claim 9, further comprising:

the composition to be administered before, during, and/or after administration of minoxidil.

12. The use of claim 9, wherein:

the composition includes minoxidil.

13. The use of claim 9, wherein:

the alkalizing agent includes one or more of a bicarbonate, citrate, a loop diuretic, MOPS, BES, TES, HEPES, DIPSO, TAPSO, Acetamidoglycine, POPSO, HEPPSO, HEPPS, Tricine, Tris (tromethamine), Glycinamide, Glycylglycine, or Bicine, TAPS.

14. The use of claim 9, wherein:

the sulfotransferase enzyme includes a human sulfotransferase enzyme and/or a non-human sulfotransferase enzyme.

15. The use of claim 9, wherein:

the sulfotransferase enzyme includes one or more of a carbohydrate sulfotransferase, a galactose-3-O-sulfotransferase, a heparan sulfate 2-O-sulfotransferase, a heparan sulfate 3-O-sulfotransferase, a heparan sulfate 6-O-sulfotransferase, a N-deacetylase/N-sulfotransferase, a tyrosylprotein sulfotransferase, an uronyl-2-sulfotransferase, an estrone sulfotransferase, a chondroitin 4-sulfotransferase, SULT1A1, SULT1A2, SULT1A3, SULT1A4, SULT1B1, SULT1C2, SULT1C3, SULT1C4, SULT1D1P, SULT1E1, SULT2A1, SULT2B1, SULT4A1, or SULT6B1, or

the sulfotransferase enzyme includes OeST1.

16. The use of claim 9, wherein:

the composition contains natural levels or extracts of minoxidil sulfotransferase enzymes, natural levels or extracts of phenol sulfotransferase enzymes, and/or natural levels or extracts sulfotransferase enzymes derived from Populus trichocarpa, Populus x canescens, Salix sp., Arabidopsis thaliana, silver poplar (Populus alba), Simon's poplar (Populus simonii), S. purpurea, P. tremuloides, I. polycarpa, P. nigra, Oryza sativa, Salicaceae family, Poplars (Populus sp.), Idesia polycarpa - Japanese orange cherry, Potato (Solanum tuberosum), Cabbage (Brassica rapa), Populus trichocarpa (Black cottonwood), Salix Sp. (Willow tree), Cotton (Gossypium), Olea europaea L, Brassica napus, Apium graveolens, brassica oleracea, Saccharina japonica, Solanum tuberosum, and/or Black cottonwood; and

the natural levels or extracts of minoxidil sulfotransferase enzymes, phenol sulfotransferase enzymes, and/or sulfotransferase enzymes is/are present in amounts ranging from 1%-100% by weight.

17. The use of claim 9, further comprising:

the quantitative measurement of activity of SULT1A1 in dermal papieli cells and/or dermal sheath of the subject.

18. The use of claim 17, further comprising:

determining a therapy treatment using the composition based on the quantitative measurement of activity of SULT1A1 in dermal papieli cells and/or dermal sheath of the subject.

19. A composition for increasing sulfotransferase enzyme activity in a scalp and/or a liver of a subject suffering from alopecia, the composition comprising:

an alkalizing agent and a sulfotransferase enzyme.

20. A use of a composition comprising an alkalizing agent and a sulfotransferase enzyme in the manufacture of a medicament for increasing sulfotransferase enzyme activity in a scalp and/or a liver of a subject suffering from alopecia.