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A Study Analysis of a New Vitiligo Treatment: Patent WO 20200588091A

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Introduction

There are increasing data that showed that low antioxidant activities and oxidative stress contribute with vitiligo pathogenesis. The results of decrease catalase activity elevated hydrogen peroxide and peroxy-nitrite concentration, lipid peroxidation reaction, and inhibition of tyrosinase activity^{1,2} which is vital for melanogenesis, and all are events that fall under the treatment's hypothesis.

Objectives

Primary objectives:

1. To gather information and statistics from patients
2. To assess the treatment response on a different population

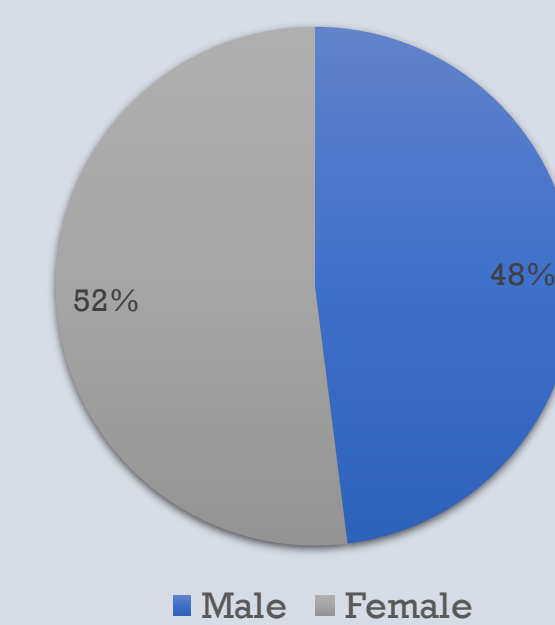
Hypothesis: The treatment hypothesis suggests that treatment of immunosuppressants or immunomodulators alone might temporarily reduce the autoimmune action but might not stop the accumulation of Chemokines and other oxidants-antioxidants. And other imbalances occurring in melanocytes create a possibility of recurrence. The antioxidant treatment alone is not exactly immunosuppressant/modulators or anti-inflammatory or stimulates the generation of melanocytes and should be combined with immuno-modulatory and phototherapy that will cause the radiation trauma triggering melanocyte production but at the same time protective from excess ROS damage that might occur (preserving the tolerance of vitiligo causing genes).

Method

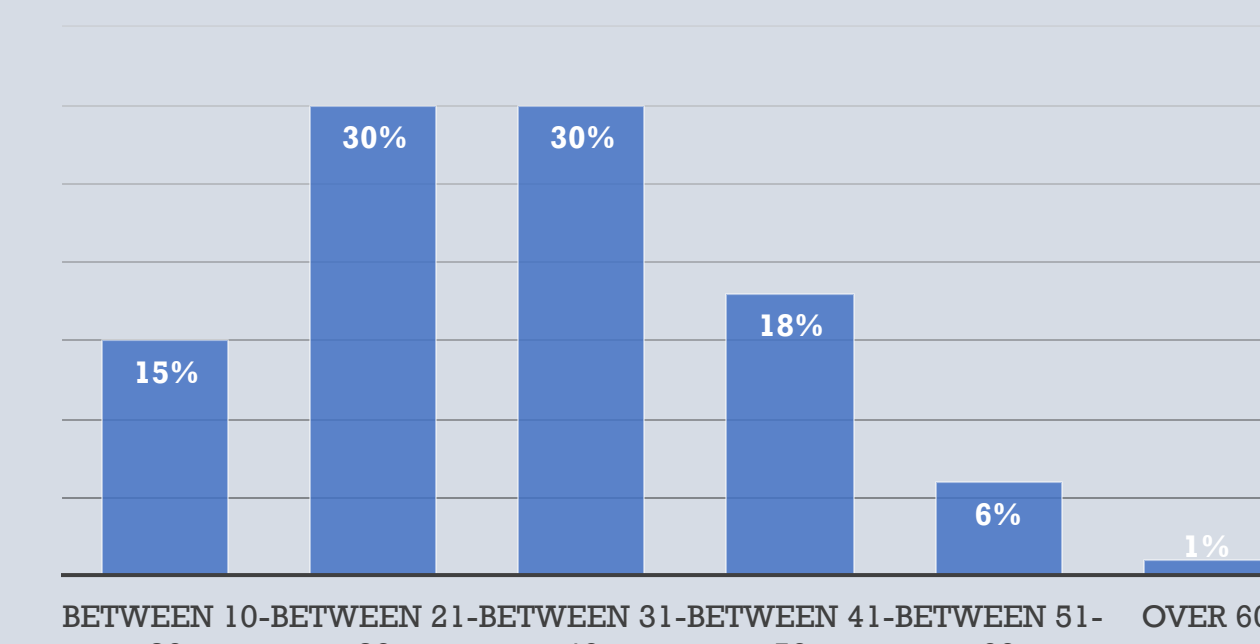
In this study, we will show you the results of a survey that has been conducted on patients who have taken the treatment course as a part of the trails, carried by dermatologists and inventors, aiming to give an initial assessment. Data was collected from 100 randomly selected patients through an online form of a questionnaire covering the evaluation of the treatment results, patients physical and psychological impacts, and their general information about the condition.

Results

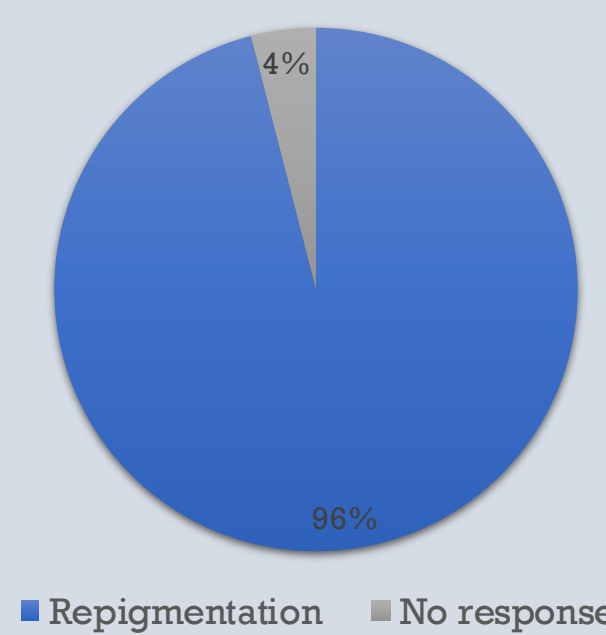
Gender



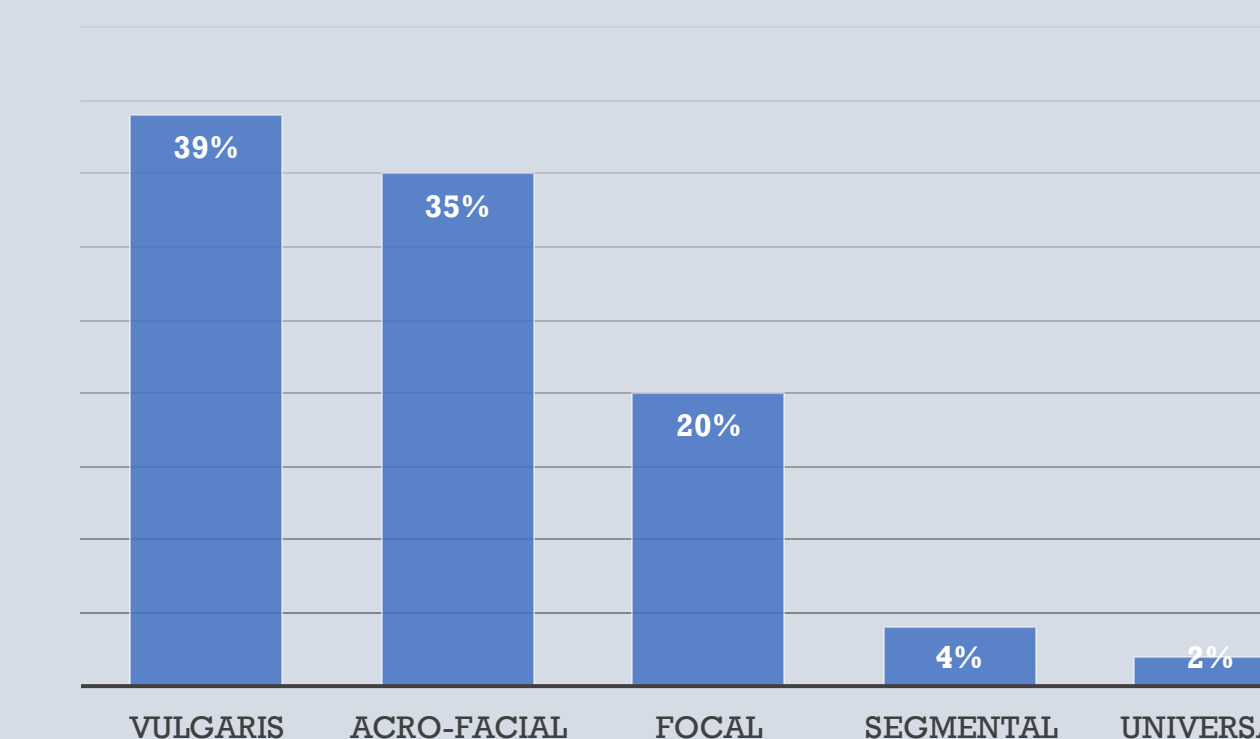
Age Groups



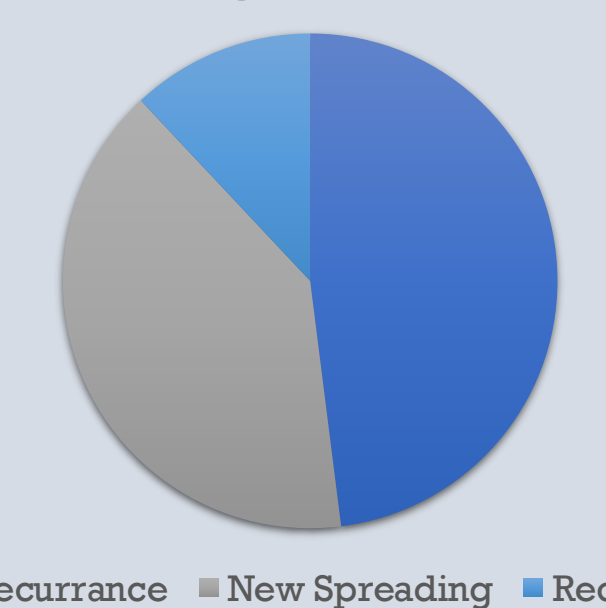
Treatment Response



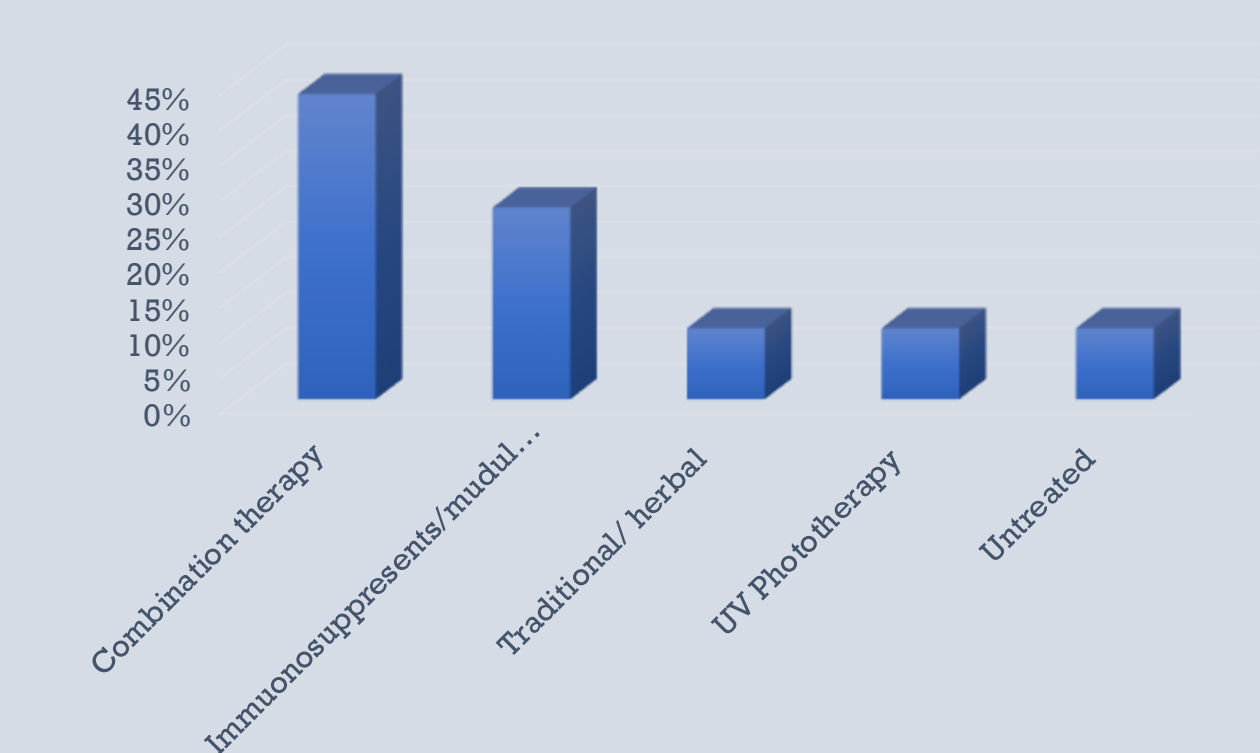
Types of Vitiligo



After Using VT Treatment



Treatments Used Prior VT Treatment



Conclusion

Patent WO20200588091A showed to be responsive among all age groups where 96% had repigmentation. On the other hand, 12% develop recurrence in the treated areas after abandoning the treatment. The treatment shows promising results on all types of vitiligo except segmental and acral vitiligo which showed to be more challenging in achieving full repigmentation.

References

1. Schallreuter, K. U., Wood, J. M. and Berger, J. (1991) 'Low catalase levels in the epidermis of patients with vitiligo', *Journal of Investigative Dermatology*, 97(6), pp. 1081-1085. doi: 10.1111/1523-1747.ep12492612.
2. Schallreuter, K. U. et al. (2012) 'Blunted epidermal L-tryptophan metabolism in vitiligo affects immune response and ROS scavenging by Fenton chemistry, part 1: epidermal H_2O_2 /ONOO⁻ mediated stress abrogates tryptophan hydroxylase and dopa decarboxylase activities, leading to low serotonin and melatonin levels', *The FASEB Journal*, 26(6), pp. 2457-2470. doi: 10.1096/fj.11-197137.

Acknowledgment

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Image 1: Radiation Control compared with VT and Radiation.



Image 2: Results on Vitiligo Vulgaris.



Image 3: Elbow joint.



Image 4: Hand wrist and palm.



Image 5: Acral vitiligo.



Image 6: Complete repigmentation case of acral vitiligo.