Alopecia areata is an autoimmune skin disease that causes significant hair loss.¹

Today:
- Alopecia areata affects more than 6.8 million Americans, over 2% of the general population.⁸
- People from all age groups, both sexes and every ethnic group can develop alopecia areata. ⁹
- An estimated 38% of individuals with alopecia areata suffer from some form of atopy, a genetic tendency to allergic diseases such as allergic rhinitis, asthma and eczema.¹⁰
- Almost half of individuals with alopecia areata show their first signs of hair loss by the age of 20.⁹
- Individuals with alopecia areata are 38% more likely than the general public to face mental health disorders.⁸
- There are currently no FDA-approved treatments developed specifically for alopecia areata. ⁹

**HOW RESEARCH IMPROVES LIVES:**
- Researchers at Columbia University Medical Center are developing a new index known as Alopecia Areata Disease Activity Index (ALADIN). ALADIN is a single measurement that will determine disease activity, providing a uniform tool to assess future clinical trials and analyze the success of potential treatments for alopecia areata.¹
- Researchers studying the use of corticosteroids in alopecia areata patients identified IL-32 as a molecule whose levels alter based on disease activity, providing a potential treatment biomarker. As a biomarker, IL-32 can potentially provide early information as to whether or not the treatment works for an individual patient. IL-32 has also been linked to other autoimmune and inflammatory diseases, such as rheumatoid arthritis, providing an opportunity to target other conditions in addition to alopecia areata.¹ ¹
- Researchers at Columbia University found that 75% of individuals with moderate to severe alopecia areata experienced significant hair regrowth when treated with ruxolitinib, an FDA-approved JAK inhibitor. Similar results have also been observed in comparable studies conducted at Stanford and Yale University. ¹

**HOW RESEARCH SAVES MONEY:**
- University of Arizona researchers have identified a gene, BACH2, which may be a key component in the development of autoimmune disorders. This may provide a potential therapeutic target for alopecia areata and other autoimmune disorders, and an opportunity to decrease the $100 billion annual cost of these conditions.¹ ¹

**The Cost:**
- Individuals with alopecia areata are at an increased risk for mental health disorders, which collectively account for $201 billion in annual health care spending in the United States. ² ²
- Autoimmune diseases, of which alopecia areata is one of the most common, collectively account for an estimated $100 billion in health care costs annually. ² ³
- Individuals with alopecia areata are at an increased risk of developing asthma, a condition that results in an annual direct medical cost of $56 billion nationwide. ² ³

**NAME:** Miranda Guerriero  
**AGE:** 26  
**CONDITION:** Alopecia areata

Miranda Guerriero cannot remember that last time that she left the house without wearing a wig. Miranda was first diagnosed with alopecia areata at five-years-old, but she did not begin wearing wigs for another two years. After her initial diagnosis, Miranda began what would be ten years of ups and downs in an attempt to find the right treatment. Throughout that process, she would never experience full regrowth of her hair, consistently suffering from patchy hair loss and missing anywhere from 30% to 70% of her hair at any one time. After attempting a wide range of treatment options, from corticosteroids to infrared laser therapy, Miranda stopped trying new treatments, and has since turned her efforts to connecting with those facing the same challenge.

The battle of hair loss and regrowth and failing treatments had taken its toll on Miranda, who struggled to maintain her mental health. While worrying about whether the newest treatment would fare better than the last, she sought support from mental health professionals for depression. Eventually, she became more comfortable with her condition, helping her to overcome her mental health struggles. Miranda’s experience with alopecia areata encouraged her to become both a Legislative Liaison and Health & Research Ambassador for the National Alopecia Areata Foundation (NAAF).

As an NAAF advocate, Miranda has spent the last four years working to help those who face the same challenges she has experienced. She is dedicated to ensuring those with alopecia areata live a happier life. With increased attention being paid to the mental health effects, Miranda is pleased with the paradigm shift of treating those with alopecia areata with a more holistic approach, rather than treating a single symptom. While Miranda waits for the research into alopecia areata to produce findings to finally help reach full hair regrowth, she puts her wig on every day and continues to advocate for a better quality of life for those with alopecia areata.
Hope for the Future:

- Founded in 2000, the Alopecia Areata Registry, Biobank & Clinical Trials Network is the largest collection of alopecia areata data and DNA samples in the world. The Registry provides vital information, such as the effect of genetic and environmental factors, which can help identify potential risk factors and inform development of effective treatments for alopecia areata.*

- University of Pennsylvania researchers are developing a new way to treat autoimmune diseases without harming the normal immune system. This approach would provide a potential therapeutic avenue that could be used across all autoimmune disorders, including alopecia areata. 

- A clinical trial at the University of Minnesota is investigating the mechanism and effectiveness of topical immunotherapy in alopecia areata, a treatment that preliminary studies have found leads to scalp hair regrowth in 40% of patients. 

The Bottom Line:
Research has helped to shed light on the genetic causes of alopecia areata and improved the clinical understanding of associated conditions and symptoms. However, a cure for this life-changing condition remains elusive. Robust funding into alopecia areata research is needed to provide hope to the approximately 6.8 million individuals living with this condition in the U.S.