

# Tofacitinib monotherapy in management of vitiligo

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## Introduction

- Tofacitinib is an oral, selective Janus kinase (JAK) inhibitor currently approved for use in rheumatoid arthritis, psoriatic arthritis, and ulcerative colitis. Recent studies suggest that tofacitinib may be an emerging treatment option for vitiligo particularly when used with concomitant phototherapy. Data evaluating its effectiveness when used as a monotherapy is limited. Here, we present the case of a 66 year old patient who had significant clinical improvement in repigmentation of vitiligo following tofacitinib monotherapy.

## Prior History

- A 66 year old African-American female with PMH significant for vitiligo for six years presented to the Wake Forest Baptist Dermatology Clinic.
- She had previously failed treatment with topical corticosteroids, topical, fluocinonide, oral prednisone, and phototherapy.
- On physical exam, notable findings included:
  - ❖ Depigmented and hypopigmented patches on the face in a periorificial distribution, around the mouth, nose, and eyes
  - ❖ Small, round, guttate depigmented and hypopigmented patches on the dorsal hands and chest

## Clinical Management and Outcome

- Based on history and previously failed treatments, the patient was initiated on oral tofacitinib monotherapy, dosed at 5mg BID.
- Patient reported initial improvement at two months.
- Significant repigmentation of affected sites on face, chest, and hands was noted over a six month period.
- The treatment was well tolerated and the patient reported no side effects.

## Clinical Photos



Figure 1A. Before treatment.

Figure 1B. Initial improvement noted after 2 months of treatment.

Figure 1C. Significant improvement with repigmentation after 6 months of treatment.

## Summary

- Current data suggests that photoactivation through phototherapy or light exposure may be necessary in order for tofacitinib to result in clinical improvement in vitiligo. In the case of the patient, tofacitinib monotherapy used over a six month period led to significant repigmentation in the affected sites with initial improvement noted at two month follow up with no adverse effects. These results suggest that tofacitinib monotherapy may be effective in management of vitiligo.

## References

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