

# Risk Factors and Comorbidities Associated with Patients Requiring Up-titration of Infliximab and Biosimilar Dosage in Patients with Hidradenitis Suppurativa

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## Introduction

- Hidradenitis Suppurativa (HS) is a chronic dermatologic condition characterized by recurrent, painful nodules that can drain and form scarring, tunneling tracts in areas prone to friction such as the axillae, groin, buttocks, and inframammary region.
- Although there is currently no cure for HS, several treatment options are available based on the extent of lesions, scarring, and sinus tracts, which are collectively factored into a staging system referred to as Hurley Stage.

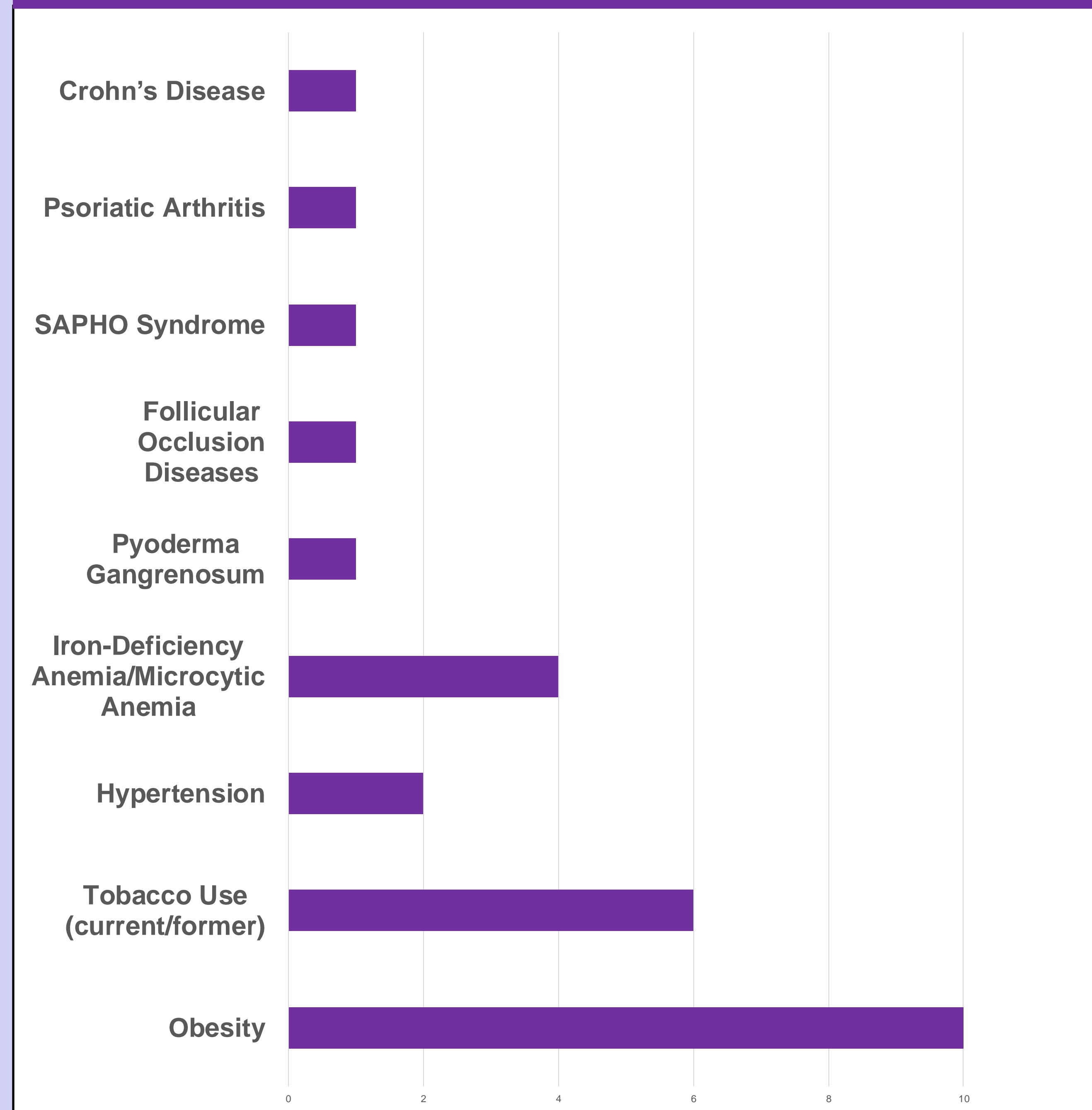


- Several pro-inflammatory cytokines are known to contribute to the formation of HS, most notably tumor necrosis factor alpha (TNF- $\alpha$ ).
- Infliximab is a TNF- $\alpha$  inhibitor, given as an infusion with a weight-based dose. Guidelines currently recommend a dosage of 5 mg/kg every 8 weeks which can be titrated up to 10 mg/kg every 4 weeks depending on patient response.
- Co-morbid conditions such as obesity have been well-characterized for Hidradenitis Suppurativa. However, because this disease has such variation in its presentation and patient populations depending on geographic location, we sought to investigate co-morbidities associated with HS in our patient population here in New Orleans as we encounter this disease frequently at University Medical Center.

## Methods

- We performed a retrospective chart review of 27 patients who initiated or continued infliximab or a biosimilar for HS at University Medical Center in New Orleans between January 1st, 2020, and December 31st, 2023.
- For each patient, we recorded disease severity (Hurley stage), duration of infliximab/biosimilar treatment, initial maintenance dosing regimen, current dosing regimen, concurrent and previous treatments, comorbidities, and patient demographics.

## Risk Factors/ Comorbidities



## Results

- The mean BMI of our cohort was 36.38. We defined effective treatment as the dosage required to attain disease control, evidenced by disease stabilization and lack of progression as well as decreased lesion drainage, decreased formation of inflammatory nodules, and decrease in patient-reported pain.

## Results

Characteristic	Incidence
Obese	(10/16)
Current/former tobacco smokers	(6/16)
Hypertension	(2/16)
Type II diabetes mellitus	(1/16)
Iron-deficiency anemia/Microcytic anemia	(4/16)
Pyoderma gangrenosum	(1/16)
Follicular occlusion diseases	(1/16)
SAPHO syndrome	(1/16)
Psoriatic arthritis	(1/16)
Crohn's disease	(1/16)

## Conclusion

- Although retrospective and limited in number of patients studied, this data reinforces the strong association of hidradenitis with obesity, especially in patients with skin of color in our patient population. This also may indicate why recent studies have shown that higher dose and frequency infusions of infliximab or its biosimilars tends to be an effective medical management for this condition.
- Lifestyle modification continues to be an important factor in counseling these patients, especially with regard to body mass index and tobacco usage. The use of GLP-1 antagonists in patients with obesity and hidradenitis suppurativa has been reported to be an effective strategy to decrease disease severity and progression.