



# Flare frequency and duration in patients with generalized pustular psoriasis (GPP)

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Flare episodes are a heavy burden for patients with GPP, and there is a need for more effective treatment options



## AIM

To characterize the frequency, number, and duration of flares in patients with GPP

## INTRODUCTION

- GPP is a rare, chronic, neutrophilic skin disease in which an overactivation of inflammatory pathways causes widespread erythema and eruption of sterile pustules that may coalesce into "lakes of pus"<sup>1-3</sup>
- GPP flares are heterogeneous, and there is no standard clinical definition of a GPP flare<sup>4</sup>
- Symptoms of these flares are painful, and severe cases may require emergency treatment and can lead to life-threatening complications such as sepsis<sup>2,3</sup>
- As GPP is a rare disease, it is difficult to obtain data on the safety and efficacy of potential new therapies. As a result, there are few approved treatments for GPP flares and acute symptoms<sup>2</sup>

## METHODS

- We conducted a retrospective chart review including patients of all ages receiving care at 27 participating sites in France, Malaysia, and Tunisia with a confirmed diagnosis of GPP after 2011

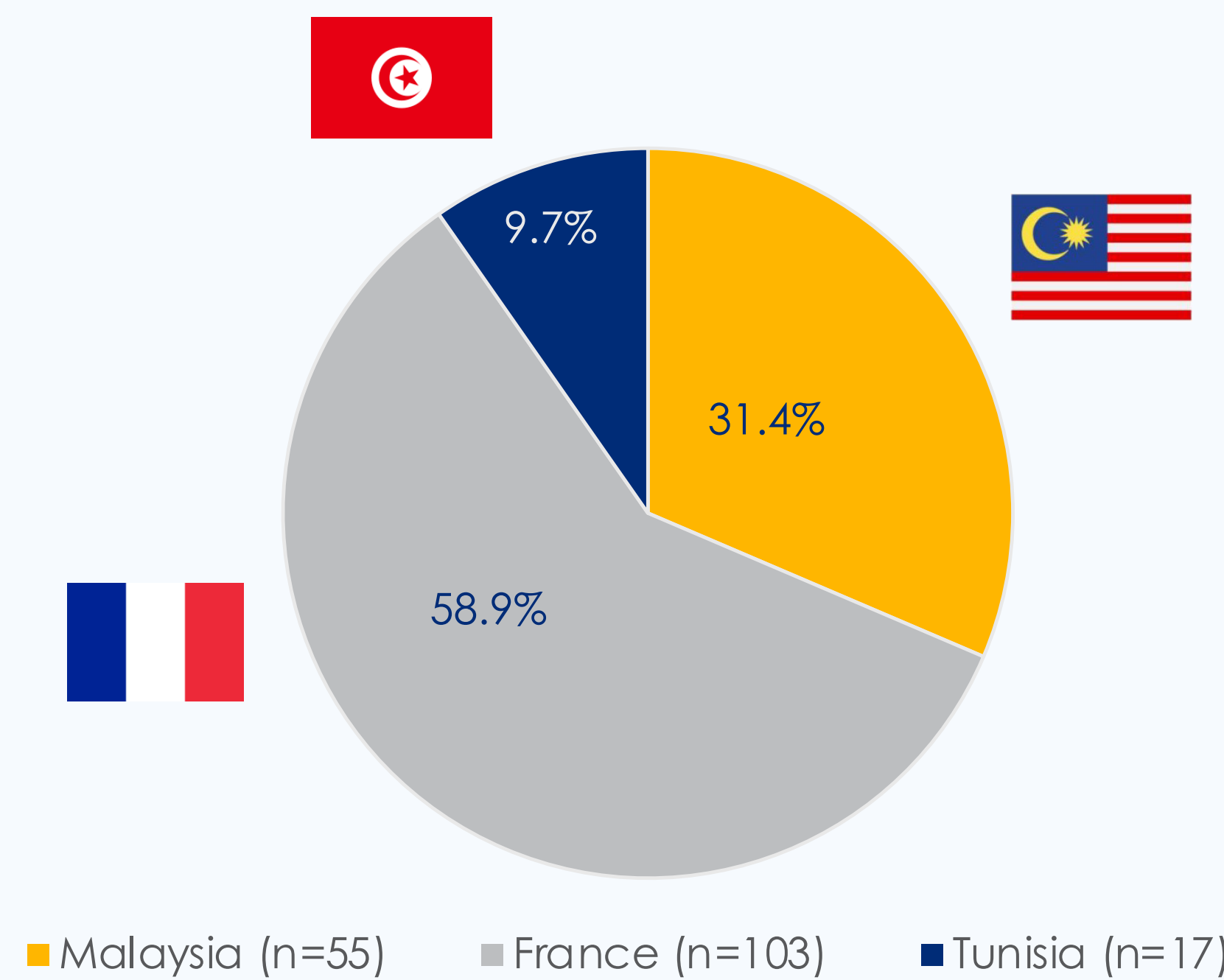
## CONCLUSIONS

- Flare episodes are a heavy burden for patients with GPP. The severity of acute episodes and burden of chronic flares demonstrate the need for more effective treatment options
- On average, 47.4% of patients experienced  $\geq 1$  flare episodes after diagnosis, with flares recurring an average of twice a year and lasting up to 5 weeks or more
  - Individual country data suggested an even higher flare burden for some populations (Tunisia, 70.6% vs Malaysia, 54.5% vs France, 39.8%)
- Flares for some patients were more frequent, totalling up to 9 episodes over the study period
- Limitations of the study included the majority of cases in this review being from France, and the lack of formal diagnostic criteria possibly introducing heterogeneity of diagnosis and reported severity of flares between sites

## RESULTS

### Study enrollment

Enrollment by country (N=175)



Mean (SD) follow-up duration was 5.0 (3.1) years

### GPP flare episodes

Total number of patients with flares since the initial flare that led to diagnosis, n (%)	Total (N=175)	France (N=103)	Malaysia (N=55)	Tunisia (N=17)
No flares	92 (52.6)	62 (60.2)	25 (45.5)	5 (29.4)
At least 1 flare	83 (47.4)	41 (39.8)	30 (54.5)	12 (70.6)

- Overall, 47.4% of patients experienced at least 1 flare episode since diagnosis
- The mean (SD) duration of flares was 34.3 (41.3) days during follow-up

Patients had an average of 2 flares per year (mean [SD] 2.33 [1.96])

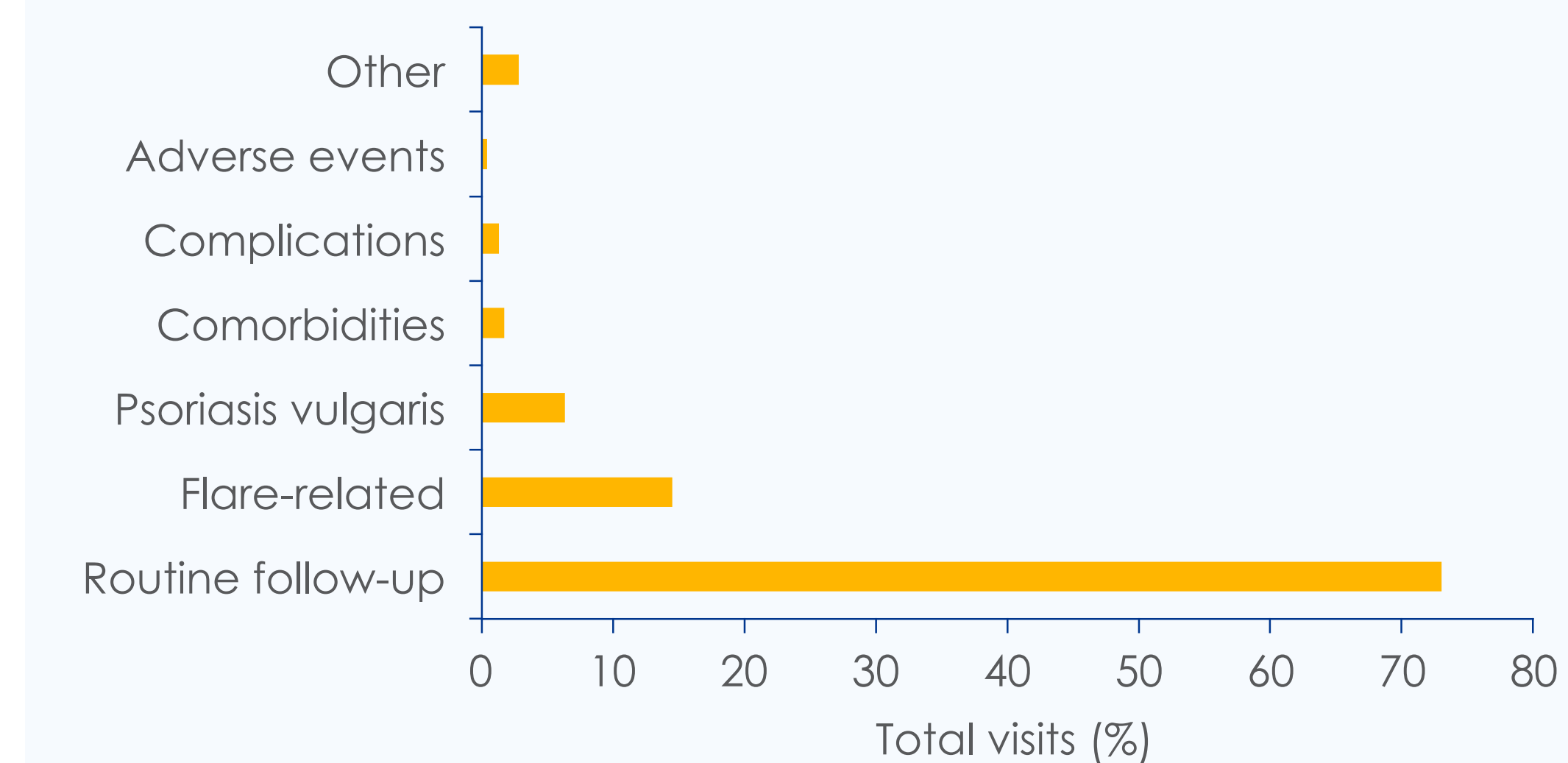
### GPP flare episodes (cont.)

Number of flares among patients who had $\geq 1$ n (%)	Total (n=83)	France (n=41)	Malaysia (n=30)	Tunisia (n=12)
1	39 (47.0)	19 (46.3)	14 (46.7)	6 (50.0)
2	21 (25.3)	12 (29.3)	8 (26.7)	1 (8.3)
3	9 (10.8)	7 (17.1)	1 (3.3)	1 (8.3)
4	3 (3.6)	1 (2.4)	2 (6.7)	-
5	5 (6.0)	2 (4.9)	1 (3.3)	2 (16.7)
6	2 (2.4)	-	2 (6.7)	-
7	1 (1.2)	-	-	1 (8.3)
8	1 (1.2)	-	1 (3.3)	-
9	2 (2.4)	-	1 (3.3)	1 (8.3)

- Of patients who had  $\geq 2$  flare episodes (60 visits), median (min, max) time between episodes was 11.6 (0.1, 52.0) months

A total of 47% of patients had 1 flare, while the most flares experienced by any patient was 9 (2.4%)

### Follow-up visit type

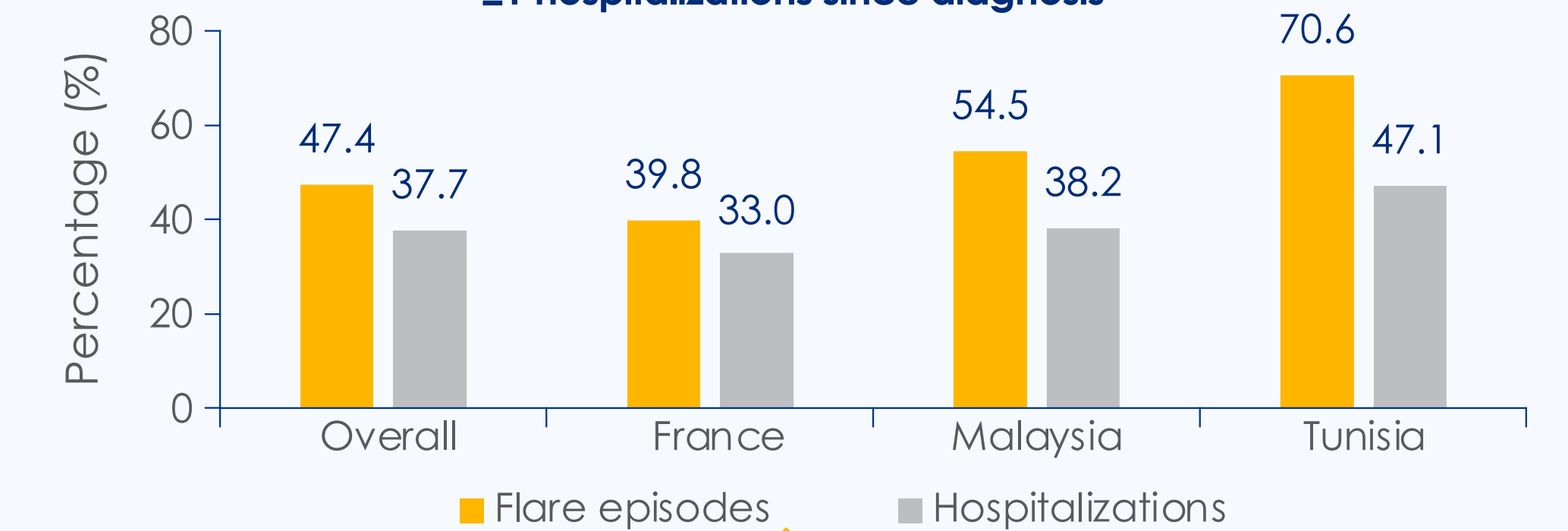


Flare-related care was the second most common reason for patient visits, surpassed only by routine follow-up

### Flare episodes and hospitalization

Total number of patients with flare-related hospitalizations since diagnosis, n (%)	Total (N=175)	France (N=103)	Malaysia (N=55)	Tunisia (N=17)
No hospitalizations	109 (62.3)	69 (67.0)	34 (61.8)	9 (52.9)
At least 1 hospitalization since diagnosis	66 (37.7)	34 (33.0)	21 (38.2)	8 (47.1)

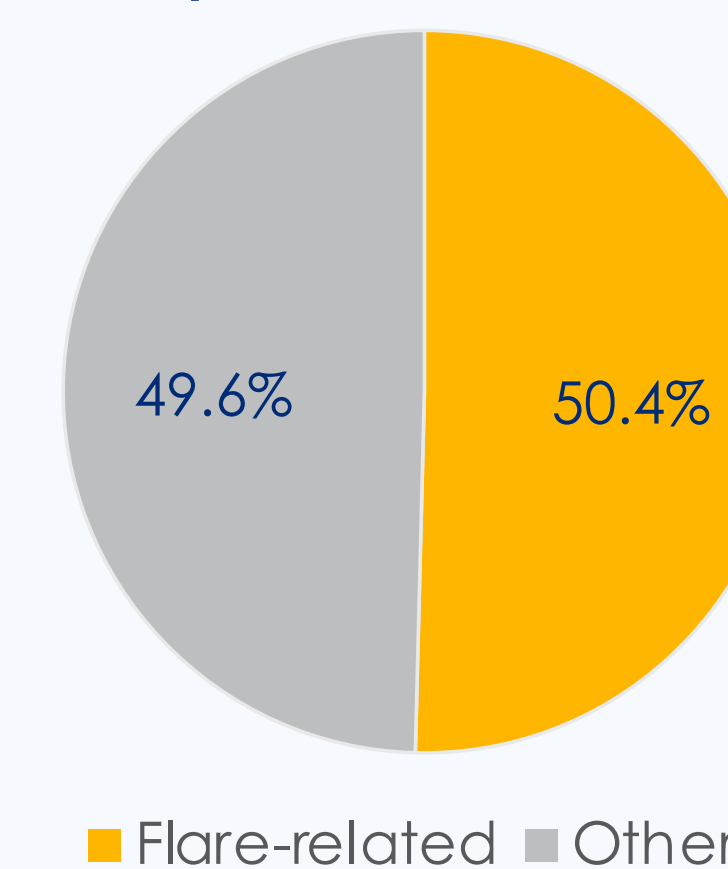
Percentage of patients with  $\geq 1$  flare episodes and  $\geq 1$  hospitalizations since diagnosis



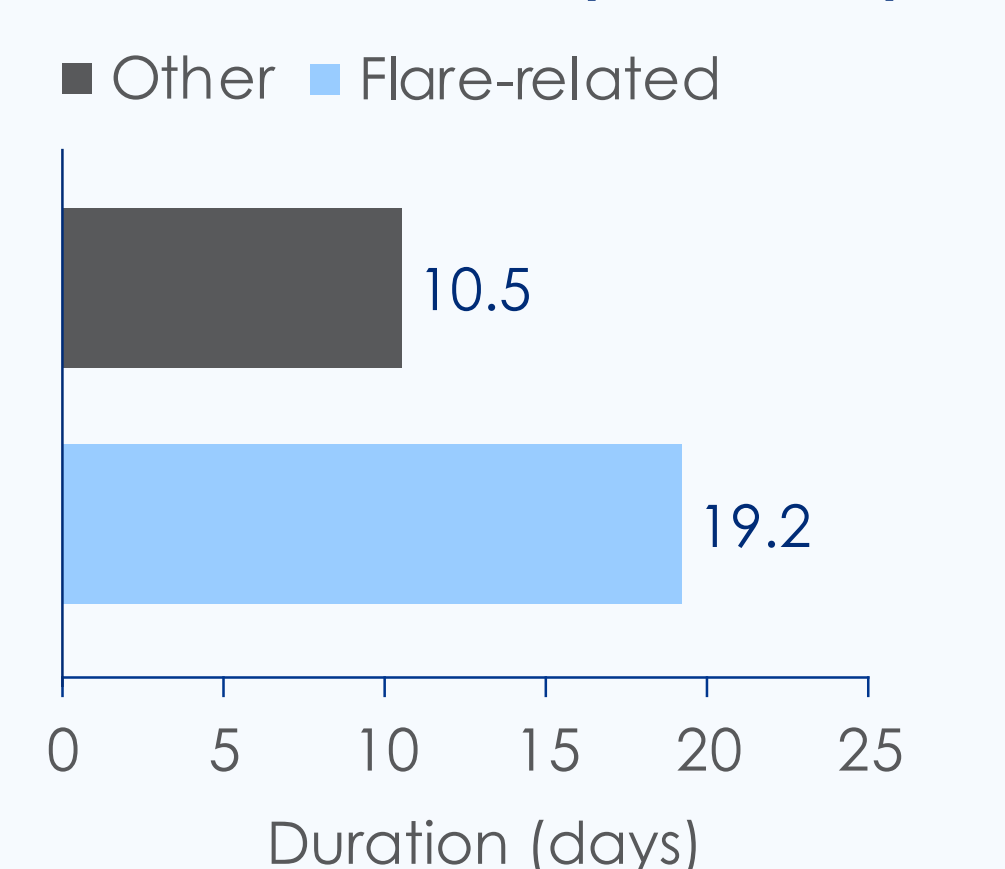
Overall, 47% of patients experienced  $\geq 1$  flare, and more than 37% of patients experienced at least 1 hospitalization since diagnosis

### Flare-related hospitalization

#### Hospitalizations



#### Mean duration of inpatient hospitalization



- The mean (SD) time between flare-related hospitalizations was 14.1 (17.1) months

Approximately half of all hospitalizations were flare-related, and the mean duration of flare-related admissions was almost twice as long as for non-flare admissions

## Abbreviations

GPP, generalized pustular psoriasis; SD, standard deviation

## References

- Gooderham M, et al. Expert Rev Clin Immunol 2019;15:907-919; 2. Crowley J, et al. Postgrad Med 2021;133:330-344; 3. Zheng M, et al. Am J Clin Dermatol 2022;23:55-512; 4. Choon SE, et al. Am J Clin Dermatol 2022;23:51-529.

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