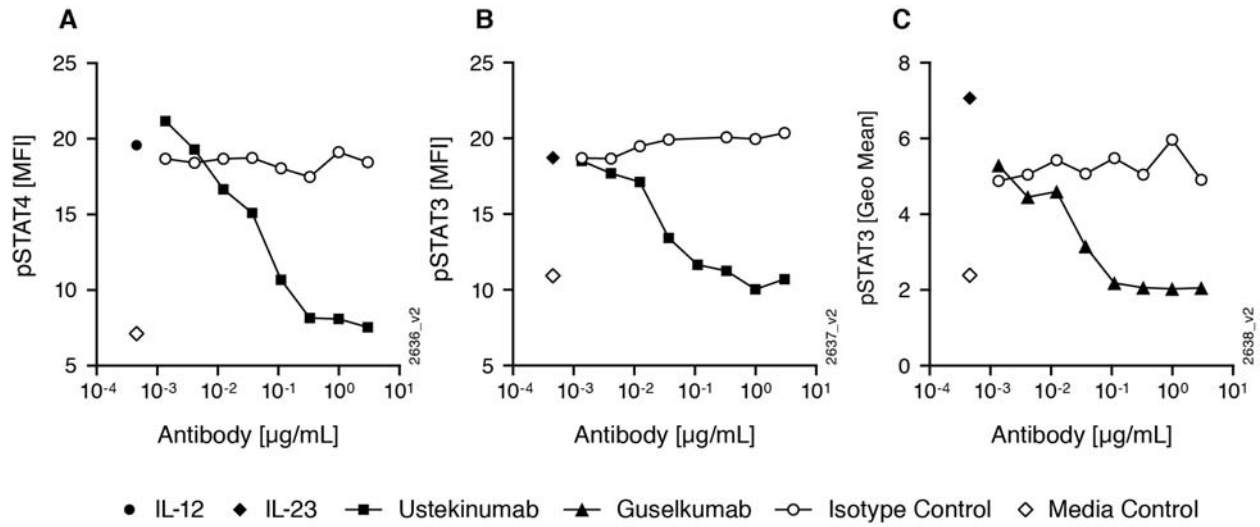**Supplemental Figure 1. In vitro binding assay: guselkumab specifically binds to IL-23p19, whereas ustekinumab specifically binds to IL-12/23p40.** Plates were coated with guselkumab, ustekinumab, or a negative isotype control antibody. Recombinant human IL-23, IL-12, or IL-12/23p40 monomer was added, and bound cytokines were detected using a biotinylated IL-12/23p40-specific mAb. Data are mean OD values of duplicate samples. *OD, optical density*

Supplemental Figure 2. Neutralization of IL-12 and IL-23 signaling mediated by STAT-3 and STAT-4. Neutralization of IL-12-mediated STAT-4 **(A)** and IL-23-mediated STAT-3 phosphorylation by ustekinumab **(B)** and guselkumab (**C**) in human NKL cells. Recombinant human IL-12 or IL-23 was pre-incubated with ustekinumab, guselkumab, or an isotype control antibody. Cells were stimulated with rhIL-12 or rhIL-23, alone or with preincubated mixtures of antibody. Detection of intracellular phosphorylated STAT-3 or STAT-4 was performed by flow cytometry. *Geo, geometric; MFI, mean fluorescence intensity; NKL, natural killer cell line; rh, recombinant human*

Supplemental Table II. Baseline demographic and disease characteristics of NAVIGATE patient cohorts

Baseline characteristic	Full cohort	Cytokine cohort	p-value[1]
Number of patients	853	120	
Age (years), mean $\pm$ SD	43.0 $\pm$ 13.0	43.1 $\pm$ 13.2	0.95
Age at onset (years), mean $\pm$ SD	27.1 $\pm$ 14.4	26.4 $\pm$ 14.0	0.59
Male, n (%)	77 (64.2)	555 (65.1)	0.85
Race, n (%)			0.83
White	101 (84.2)	731 (85.7)	
Asian	15 (12.5)	101 (11.8)	
Other	4 (3.3)	21 (2.5)	
BMI (kg/m^2), mean $\pm$ SD	29.7 $\pm$ 7.3	29.6 $\pm$ 6.9	0.92
Psoriatic arthritis, n (%)	18 (15.0)	126 (14.8)	0.95
Psoriasis disease duration (years), mean $\pm$ SD	15.9 $\pm$ 12.5	16.8 $\pm$ 12.2	0.49
BSA (%), mean $\pm$ SD	28.5 $\pm$ 19.2	28.1 $\pm$ 16.8	0.80
IGA score, n (%)			0.57
Moderate (3)	93 (77.5)	680 (79.7)	
Severe (4)	27 (22.5)	173 (20.3)	
PASI score (0-72), mean $\pm$ SD	21.0 $\pm$ 9.6	21.6 $\pm$ 9.3	0.50
Previous treatment, n (%)			
Topical agents	118 (98.3)	816 (95.7)	0.16
Phototherapy	53 (44.2)	431 (50.6)	0.19
Nonbiological systemics	61 (50.8)	455 (53.3)	0.61
TNFi	19 (15.8)	121 (14.2)	0.63

[1]Derived from t-test.

BMI, body mass index; BSA, body surface area affected by psoriasis; IGA, Investigator's Global Assessment of psoriasis; PASI, psoriasis area and severity index; TNFi, tumor necrosis factor-inhibitors