

SUPPLEMENTARY MATERIAL

Methods – *Additional Sensitivity Analyses*

The following additional sensitivity analyses were performed to better understand the association between infections and GCA:

- 1) Include infections that occurred in the 6 months prior to the index date.
- 2) Further restrict definition of GCA to patients who received at least 10 prescriptions of glucocorticoids after the index date and who never received any glucocorticoids prior to index date in order to improve accuracy of diagnosis and date of diagnosis.
- 3) Examine only cases of GCA who received a prescription for a glucocorticoid within 1 month after the index date.
- 4) Include patients with GCA whose first Read code for GCA occurred 12 months after the registration date in order to more strictly eliminate any prevalent cases.

Table S1. Results of Additional Sensitivity Analyses

Sensitivity Analysis*	Number (percent) of cases	Any infection IRR (95% CI)	Herpes Zoster Infection IRR (95% CI)
1	4,559 (100%)	1.39 (1.29, 1.51)	1.19 (1.07, 1.34)
2	2,059 (45%)	1.24 (1.11, 1.39)	1.18 (0.98, 1.42)
3	3,525 (77%)	1.25 (1.14, 1.36)	1.19 (1.05, 1.36)
4	4,479 (98%)	1.31 (1.21, 1.42)	1.18 (1.05, 1.33)

*Corresponds to analyses listed in supplementary text (see methods above).

All analyses adjusted for alcohol use, smoking history, the Charlson Comorbidity Index, prior use of non-glucocorticoid immunosuppressive therapies, and prior glucocorticoid use (if applicable).