|  | Cases <sup>b</sup> | Controls <sup>c</sup> | OR [95% CI] <sup>d</sup>         |
|--|--------------------|-----------------------|----------------------------------|
| All patients (424 <sup>a</sup> ) versus All controls (1870 <sup>a</sup> )                            | 0.24 (207)         | 0.15 (549)            | 2.84 [2.03; 3.98] <sup>e</sup>   |
| All patients exposed to allopurinol (57 <sup>a</sup> ) versus All controls (1870 <sup>a</sup> )      | 0.46 (52)          | 0.15 (549)            | 4.04 [2.74; 5.97] <sup>e</sup>   |
| French patients (4 <sup>a</sup> ) exposed to allopurinol versus French Controls (1218 <sup>a</sup> ) | 0.75 (6)           | 0.14 (360)            | 17.30 [3.48; 86.05] <sup>f</sup> |
| German patients (43 <sup>a</sup> ) exposed to allopurinol versus German Controls(652 <sup>a</sup> )  | 0.41 (35)          | 0.15 (189)            | 4.05 [2.56; 6.39] <sup>f</sup>   |

**Supplementary Table 1** Association at the top SNP rs9469003 depending on the country of origin and the drug.

<sup>&</sup>lt;sup>a</sup> Number of individuals genotyped at the marker

<sup>&</sup>lt;sup>b</sup> Frequency of the C allele in cases (number of alleles)

<sup>&</sup>lt;sup>c</sup> Frequency of the C allele in controls (number of alleles)

<sup>&</sup>lt;sup>d</sup> Odds-Ratio under a multiplicative model

<sup>&</sup>lt;sup>e</sup> These ORs were adjusted on the first two PCs to account for population stratification

<sup>&</sup>lt;sup>f</sup> Woolf's test of heterogeneity between these two OR (France and Germany) is not significant (chi-square (1df)=2.91, p-value=0.088)

|   | Cases <sup>a</sup> | Controls <sup>b</sup> | OR [95% CI] <sup>c</sup> |
|---|--------------------|-----------------------|--------------------------|
| All patients versus All controls                              | 9.45               | 4.01                  | 2.84 [2.03; 3.98]        |
| All patients exposed to allopurinol versus All controls       | 24.16              | 4.01                  | 7.77 [4.66; 12.98]       |
| French patients exposed to allopurinol versus French Controls | 33.83              | 4.15                  | 11.23 [1.23; 107.00]     |
| German patients exposed to allopurinol versus German Controls | 11.11              | 3.61                  | 9.32 [4.24; 20.50]       |

**Supplementary Table 2** Association with the CACGAC haplotype depending on the country of origin.

<sup>&</sup>lt;sup>a</sup> Frequency (%) of the haplotype in cases

<sup>&</sup>lt;sup>b</sup> Frequency (%) of the haplotype in controls

<sup>&</sup>lt;sup>c</sup> Odds-Ratio associated to the CACGAC haplotype when the reference haplotype is CATGAC