**Supplementary Table 1.** Summary of replicated loci associated with serum urate concentrations in genome-wide association study meta-analysis with all references related to gout association included [1, 2]

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Loci | Encoded protein | Function of encoded protein | Encoded protein present in renal tubular cells? | Explained variance from meta-analysis (%) | Associated with gout? |
| SLC2A9 | solute carrier family 2, member 9 protein (SLC2A9) | High capacity urate transporter.  Glucose and fructose transporter. | Yes | 3.53% | Yes [3-7] |
| *ABCG2* | human ATP-binding cassette, subfamily G, 2 (ABCG2) | Urate transporter.  Also known as also known as breast cancer resistance protein, functioning as an efflux pump. | Yes | 0.57% | Yes [5, 8, 9] |
| *PDZK1* | PDZ domain-containing 1 | A scaffolding protein that interacts with OAT4, URAT1 and NTP1. | Yes | 0.19% | No [9] |
| *SLC17A1* | renal sodium phosphate transport protein 1 (NPT1) | Voltage driven urate transporter. | Yes | 0.19% | Yes [5, 10] |
| *SLC22A11* | organic anion transporter 4 (OAT4) | Organic anion-dicarboxylate exchanger, mediates urate transport. | Yes | 0.19% | No [9] |
| *SLC16A9* | Monocarboxylic acid transporter 9 (MCT9) | Monocarboxylate co-transporter, ?urate transporter. | Yes | 0.17% | No [9] |
| *GCKR* | Glucokinase regulatory protein | Hepatic glucose sensor, associated with serum triglyceride concentrations. | No (liver and pancreatic islet cells) | 0.13% | No [9] |
| *SLC22A12* | Urate anion exchanger 1 (URAT1) | Organic anion transporter, non-voltage dependent exchange for urate. | Yes | 0.13% | Yes [11, 12] |

**Supplementary table references**

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