**Additional file 5.** Evidence of association (p<5×10-8) of significant SNP with other traits.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Exposure** | **SNP** | **CHR** | **Gene** | **Trait** |
| Mononucleosis | rs2596465 | 6 | HCP5 | Red cell distribution width (PMID: 27863252) |
| IgA deficiency (PMID: 27723758) |
| Allergic disease (PMID: 29083406) |
| Asthma (UK biobank) |
| Primary sclerosing cholangitis (PMID: 27992413) |
| Intestinal malabsorption or coeliac disease (UK biobank) |
| Self-reported psoriasis (UK biobank) |
| Treatment with insulin (UK biobank) |
| Rheumatoid arthritis (PMID: 24390342) |
| Cold sores | rs885950 | 6 | POU5F1 | Human Blood Cell (PMID: 27863252) |
| IgA deficiency (PMID: 27723758) |
| Diabetes diagnosed by doctor (UK biobank) |
| Intestinal malabsorption or coeliac disease (UK biobank) |
| Self-reported hyperthyroidism or thyrotoxicosis (UK biobank) |
| Self-reported psoriasis (UK biobank) |
| Treatment with insulin (UK biobank) |
| Unspecified hematuria (UK biobank) |
| Rheumatoid arthritis (PMID: 24390342) |
| rs4360170 | 6 | HCP5 | Human Blood Cell (PMID: 27863252) |
| Rheumatoid arthritis (PMID: 24390342) |
| Self-reported hypothyroidism or myxedema (UK biobank) |
| Treatment with levothyroxine sodium (UK biobank) |
| Chickenpox | rs9266089 | 6 | HLA-B | Human Blood Cell (PMID: 27863252) |
| Rheumatoid arthritis (PMID: 24390342) |
| rs10947050 | 6 | RNF39 | Human Blood Cell (PMID: 27863252) |
| Rheumatoid arthritis (PMID: 24390342) |
| IgA deficiency (PMID: 27723758) |
| Birth weight of first child (UK biobank) |
| Intestinal malabsorption (UK biobank) |
| Mouth or teeth dental problems: mouth ulcers (UK biobank) |
| Peak expiratory flow (UK biobank) |
| Self-reported malabsorption or coeliac disease (UK biobank) |
| Self-reported multiple sclerosis (UK biobank) |

CHR: chromosome; SNPs: single nucleotide polymorphisms.