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| **Supplemental Table 1: Source of participants from InterLymph case-control studies** |
|  |  |  |  |  |  |  | NHL Patients |  | Controls |
| Study | Location | Year | Age (years) | Matching variables | Questionnaire | Sample type | N (% IM history available) |  | N (% IM history available) | Source | Source type |
| BC | British Columbia, Canada | 2000-2004 | 20-80 | Age, sex, region | Self-administered and computer-assisted telephone interview | Blood or saliva | 833 (93%) |  | 848 (99%) | Random selection from client registry of Ministry of Health | population-based |
| Epilymph | Spain | 1998-2003 | 17-96 | Age, sex, region | Self-administered | Blood | 441 (99%) |  | 631 (99%) | Patients admitted to hospital for infectious, parasitic, mental, nervous, circulatory, digestive, endocrine, metabolic or respiratory conditions | clinic-based |
|  | France | 2000-2003 | 18-82 | Age, sex, region | Self-administered | Blood | 218 (100%) |  | 276 (100%) | Patients admitted to hospital for infectious, parasitic,mental, nervous, circulatory, digestive, endocrine,metabolic and respiratory conditions | clinic-based |
|  | Germany | 1999-2002 | 18-82 | Age, sex, region | Self-administered | Blood | 518 (93%) |  | 710 (95%) | Random selection from population registries | population-based |
|  | Italy | 1998-2004 | 25-81 | Age, sex, region | Self-administered | Blood | 222 (99.5%) |  | 336 (100%) | Random selection from population registries | population-based |
|  | Ireland | 1998-2004 | 19-85 | Age, sex, center | Self-administered | Blood | 146 (97%) |  | 208 (99.5%) | Patients admitted to hospital for infectious, parasitic,mental, nervous, circulatory, digestive, endocrine,metabolic or respiratory conditions | clinic-based |
|  | Czech Republic | 2001-2003 | 19-82 | Age, sex, region | Self-administered | Blood | 199 (99%) |  | 304 (100%) | Patients admitted to hospital for infectious, parasitic,mental, nervous, circulatory, digestive, endocrine,metabolic and respiratory conditions | clinic-based |
| Mayo Clinic | Minnesota, USA | 2002-2008 | 20-87 | Age, sex, region | Self-administered | Blood | 1128 (81%) |  | 1319 (81%) | Patients attending a pre-scheduled general medicalexam | clinic-based |
| NCI-SEER | Detroit; Iowa;Los Angeles;Seattle, USA | 1998-2001 | 20-74 | Age, region, race | Self-administered | Blood and Saliva | 1321 (57%) |  | 1057 (57%) | <65y: RDD; 65y+: random selection from CMS | population-based |
| SCALE | Denmark; Sweden | 1999-2002 | 18-74 | Age, sex, country | Telephone interview with a standardized, computer-aided questionnaire | Blood | 3055 (99%) |  | 3187 (99%) | Random selection from population registries | population-based |
| UCSF | San Francisco,CA, USA | 1988-1995 | 21-74 | Age, sex, region | In-person Interview | Blood | 1302 (99.8%) |  | 2402 (99.8%) | All ages: RDD;plus for 65y: random selection fromCMS | population-based |
| Yale | Connecticut, USA | 1995-2001 | 21-84 | Age, sex | In-person Interview | Blood | 600 (1%) |   | 717 (100%) | <65y: RDD; 65y+: random selection from CMS | population-based |

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| **Supplemental Table 2: Associations between NHL and candidate risk variants [IL1A (rs1800587), IL1B (rs16944, rs1143627), IL1RN (rs454078), IL2 (rs2069762), IL6 (rs1800795, rs1800797), IL10 (rs1800896, rs1800890), TNFA (rs1800629), HLA I (rs6457327), and HLA II (rs10484561)]** |
|  | Genotyped Controls | Genotyped NHL Patients |  |  |  |   |
|  | N | N | OR a | 95% CI | p-value |   |
| IL1A-889C>T (rs1800587) | 2,317 | 2,084 | 1.00 | [0.89, 1.13] | 0.97 |  |
| IL1B-511C>T (rs16944) | 1,280 | 1,311 | 1.17 | [1.00, 1.37] | 0.05 |  |
| IL1B-31C>T (rs1143627) | 3,715 | 3,130 | 1.06 | [0.96, 1.17] | 0.22 |  |
| IL1RN-9589A>T (rs454078) | 2,319 | 2,068 | **1.19** | **[1.06, 1.35]** | **0.004** | b |
| IL2–384T>G (rs2069762) | 2,320 | 2,080 | 1.11 | [0.99, 1.25] | 0.09 |  |
| IL6-174G>C (rs1800795) | 2,347 | 2,099 | 0.93 | [0.82, 1.05] | 0.25 |  |
| IL6-597G>A (rs1800797) | 3,852 | 3,304 | 0.94 | [0.85, 1.04] | 0.22 |  |
| IL10-1082A>G (rs1800896) | 4,173 | 3,472 | 1.06 | [0.96, 1.18] | 0.24 |  |
| IL10-3575T>A (rs1800890) | 5,914 | 5,629 | 1.08 | [1.00, 1.16] | 0.06 |  |
| TNF-308G>A (rs1800629) | 5,562 | 5,546 | **1.12** | **[1.03, 1.22]** | **0.01** |  |
| HLA: C>A (rs6457327) | 2,963 | 2,457 | **0.82** | **[0.74, 0.92]** | **<0.001** | **b** |
| HLA: T>G (rs10484561) | 3,989 | 3,176 | **1.31** | **[1.17, 1.46]** | **<0.001** | **b** |
| CI: confidence interval; NHL: non-Hodgkin lymphoma; OR: odds ratio |
| a ORs, CIs, and p-values calculated using logistic regression models adjusted for age, sex, study center, and socioeconomic status |
| b Evidence against the null hypotheses persists after accounting for multiple comparisons using pACT statistic. |

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| **Supplemental Table 3: Association between NHL and history of infectious mononucleosis by NHL subtype** |
|  | Control | NHL Patients |  |  |  |   |
|  | N | N | OR a | 95% CI | p-value |
| All NHL | 10,018 | 7,926 | **1.20** | **[1.04, 1.38]** | **0.01** |  |
| CLL/SLL | 10,018 | 1,466 | **1.51** | **[1.13, 2.02]** | **0.006** | b |
| DLBCL | 10,018 | 2,246 | 1.10 | [0.89, 1.37] | 0.37 |  |
| FL | 10,018 | 1,691 | 1.08 | [0.86, 1.37] | 0.49 |  |
| MCL | 10,018 | 325 | **2.29** | **[1.41, 3.75]** | **0.001** | b |
| T-Cell | 10,018 | 509 | 1.32 | [0.89, 1.96] | 0.17 |  |
| CI: confidence interval; CLL/SLL: chronic lymphocytic leukemia/small lymphocytic lymphoma; DLBCL: diffuse large B-cell lymphoma; FL: follicular lymphoma; MCL: mantle cell lymphoma; NHL: non-Hodgkin lymphoma; OR: odds ratio. |
| a ORs, CIs, and p-values calculated using logistic regression models stratified by genotype and adjusted for age, sex, study center, and socioeconomic status. |
| b Evidence against the null hypotheses persists after accounting for multiple comparisons using Bonferroni correction. |

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| **Supplemental Table 4: Association between IM history of infectious mononucleosis and T-cell lymphoma among genotyped participants stratified by *IL1B* (rs16944, rs1143627) and *IL6* (rs1800795, rs1800797) genotypes**  |
| Variant |  | Controls |  | T-Cell Patients |  |  |  |
| Genotype | IM- | IM+ |   | IM- | IM+ | ORa | 95% CI | p-value |
| *IL1B*-511C>T (rs16944) | CC | 559 | 35 |  | 42 | 5 | 1.91 | [0.67, 5.45] | 0.23 |
|  | TC/TT | 654 | 32 |  | 47 | 3 | 1.39 | [0.38, 5.11] | 0.62 |
|  |  |  |  |  |  |  |  |  |  |
| *IL1B*-31C>T (rs1143627) | TT | 1626 | 86 |  | 95 | 7 | 1.55 | [0.67, 3.62] | 0.31 |
|  | CT/CC | 1,907 | 96 |  | 100 | 4 | 0.92 | [0.32, 2.63] | 0.87 |
|  |  |  |  |  |  |  |  |  |  |
| *IL6*-174G>C (rs1800795) | GG | 734 | 54 |  | 46 | 5 | 1.25 | [0.45, 3.50] | 0.67 |
|  | CG/CC | 1,461 | 98 |  | 74 | 4 | 0.78 | [0.27, 2.26] | 0.64 |
|  |  |  |  |  |  |  |  |  |  |
| *IL6*-597G>A (rs1800797) | GG | 1298 | 66 |  | 73 | 6 | 1.30 | [0.51, 3.27] | 0.58 |
|   | AG/AA | 2,364 | 124 |   | 135 | 5 | 0.77 | [0.30, 1.98] | 0.59 |
| CI: confidence interval; IM: infectious mononucleosis; OR: odds ratio. |
| a ORs, CIs, and p-values calculated using logistic regression models stratified by genotype and adjusted for age, sex, study center, and socioeconomic status. Effect estimates are unstable due to low sample sizes in IM+ T-cell patients’ strata. |