## Regional association plots

Regional association plots are presented below for each of the 68 genomic loci associated with rhythm that surpassed the threshold for genome-wide significance. Plots were generated for each locus using FUMA, from the rhythm summary statistics (which had undergone two rounds of LD pruning, first at $r^{2}=0.6$ [independent SNPs], and another round of pruning at $r^{2}=0.1, k b=250$ ). In each plot, the top independent SNP for each locus is depicted as "Top lead SNP", with a navy circle.
rs848293

rs62340585


rs10779987


rs1832909


rs7542


rs9400241


| $108,900,000$ | $108,950,000$ |
| :---: | :---: |
| Chromosome 6 |  |


rs1468701


| $127,300,000$ | $127,400,000$ | $127,500,000$ | $127,600,000$ | $127,700,000$ | $127,800,000$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Chromosome 7 |  |  |  |  |


rs2635634


22,850,000
rs9626920


| $46,410,000$ | $46,420,000$ | $46,430,000$ |
| :---: | :---: | :---: |
|  | $46,440,000$ |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

rs764299

rs10984506


| $100,600,000$ | $100,650,000$ | $100,700,000$ |
| :--- | :--- | :--- |
|  | Chromosome 9 |  |

rs1426371


rs72700870


| $150,400,000$ | $150,600,000$ |
| :---: | :---: | :---: |
| Chromosome 1 |  |



| $98,550,000$ | $98,600,000$ | $98,650,000$ <br> Chromosome 6 | $98,700,000$ | $98,750,000$ |
| :--- | :--- | ---: | ---: | ---: |

rs6572878


| $23,380,000$ | $23,400,000$ | $23,420,000$ | $23,440,000$ | $23,460,000$ | $23,480,000$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | Chromosome 14 |  |  |  |
|  |  |  |  |  |  |

rs11210206

rs72633496



| $28,920,000$ | $28,940,000$ | $28,960,000$ | $28,980,000$ | $29,000,000$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Chromosome 2 |  |  |  |

rs3024293


| $42,900,000$ | $42,950,000$ | $43,000,000$ |
| :---: | :---: | :---: |
|  | Chromosome 17 |  |


rs1349028



| $170,200,000$ | $170,300,000$ | $170,400,000$ | $170,500,000$ | $170,600,000$ |
| :--- | :--- | :--- | :--- | :--- |
|  |  | Chromosome 4 |  |  |
|  |  |  |  |  |

rs1901739


| $114,000,000$ | $114,100,000$ | $114,200,000$ |
| ---: | ---: | ---: |
| Chromosome 5 |  |  |



| $204,450,000$ | $204,500,000$ | $204,550,000$ |
| :---: | :---: | :---: |
|  |  | Chromosome 1 |

rs8079923


| $19,800,000$ | $19,850,000$ | $19,900,000$ | $19,950,000$ |
| :---: | :---: | :---: | :---: |



| $26,480,000$ | $26,500,000$ | $26,520,000$ | $26,540,000$ | $26,560,000$ |
| :--- | :---: | :---: | :---: | :---: |

rs6087848


| $30,700,000$ | $30,800,000$ | $30,900,000$ | $31,000,000$ |
| :---: | :---: | :---: | :---: |


rs13163173

rs2819333


| $44,000,000$ | $44,050,000$ | $44,100,000$ | $44,150,000$ | $44,200,000$ | $44,250,000$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |

rs2453873


| $23,060,000$ | $23,070,000$ | $23,080,000$ | $23,090,000$ |
| :---: | :---: | :---: | :---: |
|  | Chromosome 12 |  |  |


rs2284901


rs10978661


| $109,614,000$ | $109,615,000$ | $109,616,000$ | $109,617,000$ |
| :---: | :---: | :---: | :---: |
| Chromosome 9 | $109,618,000$ |  |  |


rs7939759


| $66,200,000$ | $66,250,000$ | $66,300,000$ | $66,350,000$ | $66,400,000$ |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Chromosome 11 |  |  |



## rs12638746




| $74,720,000$ | $74,740,000$ | $74,760,000$ |  |
| :---: | :---: | :---: | :---: |
| Chromosome 15 | $74,780,000$ |  |  |
|  |  |  |  |

rs2505344


rs10932201


rs6548147


rs11996434


rs1996148

rs191373913


| $233,790,000$ | $233,795,000$ |
| :--- | :--- |
| Chromosome 2 | $233,800,000$ |

rs12056186

rs7856850

rs13197257

rs10497355

rs11692449


rs43182


rs476141


rs571760466


