

## Supplementary Data

SUPPLEMENTARY TABLE S1. THE ASSOCIATIONS OF EACH OF THE SEVEN INVESTIGATED SNPs WITH EPIDURAL ROPIVACAINE CONSUMPTION DURING BREAST CANCER SURGERY IN WOMEN FROM NORTHEAST OF CHINA, HEILONGJIANG PROVINCE

<i>SNP: rs3803662 near TNCR9</i>							
<i>Genotype</i>		GG	GA	AA	GA+AA	<i>p, three groups<sup>a</sup></i>	<i>p, two groups<sup>b</sup></i>
<i>n</i>		45	170	202	372		
Age, years	Mean	46.7	49.5	49.8	49.7	0.175	0.066
	SD	8.8	10.2	10.5	10.3		
Height, cm	Mean	162.2	160.4	160.2	160.3	0.029	0.008
	SD	4.1	4.0	5.0	4.6		
Weight, kg	Mean	65.0	62.2	62.4	62.3	0.186	0.069
	SD	11.2	9.0	9.6	9.3		
BMI, kg/m <sup>2</sup>	Mean	24.7	24.2	24.3	24.2	0.651	0.401
	SD	3.8	3.2	3.5	3.4		
Initial lidocaine, mg	Median	66.5	66.5	66.5	66.5	0.861	0.693
	[interquartile range]	[66.5,66.5]	[66.5,66.5]	[66.5,66.5]	[66.5,66.5]		
Total ropivacaine, mg	Median	58.8	53.2	53.6	53.4	0.220	0.135
	[interquartile range]	[42.4,86.0]	[40.9,65.6]	[41.4,70.0]	[40.9,68.6]		
Onset of ropivacaine, min	Median	6.0	6.0	6.0	6.0	0.619	0.355
	[interquartile range]	[5.0,7.5]	[5.0,7.0]	[5.0,7.0]	[5.0,7.0]		
Duration of surgery, min	Median	95.0	95.0	90.0	92.5	0.474	0.412
	[interquartile range]	[75.0,132.5]	[80.0,120.0]	[75.0,120.0]	[75.0,120.0]		
Mean ropivacaine, mg/min	Median	0.6	0.6	0.6	0.6	0.295	0.349
	[interquartile range]	[0.5,0.8]	[0.4,0.7]	[0.4,0.8]	[0.4,0.8]		
<i>SNP: rs12443621 near TNCR9</i>							
<i>Genotype</i>		GG	GA	AA	GA+AA	<i>p, three groups<sup>a</sup></i>	<i>p, two groups<sup>b</sup></i>
<i>n</i>		146	196	75	271		
Age, year	Mean	49.8	49.4	48.3	49.1	0.564	0.500
	SD	10.1	10.3	10.4	10.3		
Height, cm	Mean	160.5	160.5	160.7	160.5	0.906	0.906
	SD	4.7	4.6	4.2	4.5		
Weight, kg	Mean	62.4	62.6	62.9	62.7	0.937	0.809
	SD	10.4	8.6	10.3	9.1		
BMI, kg/m <sup>2</sup>	Mean	24.2	24.3	24.4	24.3	0.961	0.797
	SD	3.7	3.0	3.7	3.2		
Initial lidocaine, mg	Median	66.5	66.5	66.5	66.5	0.516	0.339
	[interquartile range]	[66.5,66.5]	[66.5,66.5]	[66.5,66.5]	[66.5,66.5]		
Total ropivacaine, mg	Median	55.5	53.1	53.4	53.2	0.602	0.557
	[interquartile range]	[41.7,71.9]	[40.3,67.7]	[44.2,71.6]	[41.0,67.9]		
Onset of ropivacaine, min	Median	6.0	6.0	6.0	6.0	0.239	0.121
	[interquartile range]	[5.0,7.0]	[5.0,7.8]	[5.0,7.0]	[5.0,7.0]		
Duration of surgery, min	Median	90.0	100.0	90.0	95.0	0.620	0.768
	[interquartile range]	[75.0,120.0]	[75.0,120.0]	[75.0,110.0]	[75.0,120.0]		
Mean ropivacaine, mg/min	Median	0.6	0.6	0.6	0.6	0.509	0.610
	[interquartile range]	[0.4,0.8]	[0.4,0.7]	[0.5,0.8]	[0.4,0.8]		

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SUPPLEMENTARY TABLE S1. (CONTINUED)

<i>SNP: rs889312 in MAP3K1</i>							
<i>Genotype</i>		<i>AA</i>	<i>AC</i>	<i>CC</i>	<i>AC+CC</i>	<i>p, three groups<sup>a</sup></i>	<i>p, two groups<sup>b</sup></i>
<i>n</i>		112	191	114	305		
Age, year	Mean	51.0	48.9	48.6	48.8	0.150	0.052
	SD	10.1	10.5	9.7	10.2		
Height, cm	Mean	160.6	160.6	160.3	160.5	0.843	0.902
	SD	4.0	4.8	4.8	4.8		
Weight, kg	Mean	62.4	62.9	62.3	62.7	0.813	0.745
	SD	9.1	9.5	10.2	9.7		
BMI, kg/m <sup>2</sup>	Mean	24.2	24.4	24.2	24.3	0.840	0.686
	SD	3.2	3.5	3.6	3.5		
Initial lidocaine, mg	Median	66.5	66.5	66.5	66.5	0.896	0.688
	[interquartile range]	[66.5,66.5]	[66.5,66.5]	[66.5,66.5]	[66.5,66.5]		
Total ropivacaine, mg	Median	53.3	53.6	54.8	53.6	0.470	0.440
	[interquartile range]	[41.1,74.0]	[39.8,68.3]	[44.1,68.0]	[41.2,68.0]		
Onset of ropivacaine, min	Median	6.0	6.0	6.0	6.0	0.939	0.743
	[interquartile range]	[5.0,8.0]	[5.0,7.0]	[5.0,7.0]	[5.0,7.0]		
Duration of surgery, min	Median	105.0	90.0	90.0	90.0	0.029	0.008
	[interquartile range]	[81.3,120.0]	[75.0,120.0]	[75.0,120.0]	[75.0,120.0]		
Mean ropivacaine, mg/min	Median	0.6	0.6	0.6	0.6	0.594	0.512
	[interquartile range]	[0.4,0.8]	[0.4,0.8]	[0.5,0.8]	[0.4,0.8]		
<i>SNP: rs3817198 in LSP1</i>							
<i>Genotype</i>		<i>TT</i>	<i>TC</i>	<i>CC</i>	<i>TC+CC</i>	<i>p, three groups<sup>a</sup></i>	<i>p, two groups<sup>b</sup></i>
<i>n</i>		311	102	4	106		
Age, year	Mean	49.3	49.5	51.3	49.5	0.924	0.842
	SD	10.2	10.3	8.8	10.2		
Height, cm	Mean	160.5	160.7	161.3	160.7	0.876	0.655
	SD	4.6	4.6	2.5	4.6		
Weight, kg	Mean	62.2	64.0	57.5	63.7	0.156	0.163
	SD	9.5	9.7	2.1	9.6		
BMI, kg/m <sup>2</sup>	Mean	24.2	24.8	22.1	24.7	0.140	0.196
	SD	3.4	3.4	1.1	3.4		
Initial lidocaine, mg	Median	66.5	66.5	66.5	66.5	0.943	0.939
	[interquartile range]	[66.5,66.5]	[66.5,66.5]	[56.5,66.5]	[66.5,66.5]		
Total ropivacaine, mg	Median	53.6	54.3	51.1	53.9	0.858	0.585
	[interquartile range]	[41.4,70.1]	[40.3,65.9]	[47.7,65.2]	[40.8,65.9]		
Onset of ropivacaine, min	Median	6.0	6.0	5.0	6.0	0.180	0.147
	[interquartile range]	[5.0,7.0]	[5.0,7.0]	[3.5,6.5]	[5.0,7.0]		
Duration of surgery, min	Median	95.0	90.0	70.0	90.0	0.338	0.182
	[interquartile range]	[75.0,120.0]	[70.0,120.0]	[60.0,170.0]	[7.0,120.0]		
Mean ropivacaine, mg/min	Median	0.6	0.6	0.7	0.6	0.838	0.741
	[interquartile range]	[0.4,0.8]	[0.5,0.8]	[0.4,0.8]	[0.5,0.8]		
<i>SNP: rs13387042 at 2q35</i>							
<i>Genotype</i>		<i>GG</i>	<i>GA</i>	<i>AA</i>	<i>GA+AA</i>	<i>p, three groups<sup>a</sup></i>	<i>p, two groups<sup>b</sup></i>
<i>n</i>		319	95	3	98		
Age, year	Mean	49.6	48.3	54.0	48.5	0.386	0.320
	SD	10.4	9.6	8.7	9.5		
Height, cm	Mean	160.3	161.5	153.3	161.3	0.002	0.063
	SD	4.3	5.3	2.3	5.4		
Weight, kg	Mean	62.7	62.3	56.7	62.1	0.517	0.580
	SD	9.3	10.2	13.6	10.3		
BMI, kg/m <sup>2</sup>	Mean	24.4	23.9	24.0	23.9	0.412	0.183

(continued)

SUPPLEMENTARY TABLE S1. (CONTINUED)

SNP: rs13387042 at 2q35							
Genotype		GG	GA	AA	GA+AA	p, three groups <sup>a</sup>	p, two groups <sup>b</sup>
Initial lidocaine, mg	SD	3.3	3.6	5.0	3.7	0.688	0.512
	Median	66.5	66.5	66.5	66.5		
Total ropivacaine, mg	[interquartile range]	[66.5,66.5]	[66.5,66.5]	[53.2,66.5]	[66.5,66.5]	0.282	0.279
	Median	53.6	53.6	61.8	53.7		
Onset of ropivacaine, min	[interquartile range]	[41.8,69.9]	[37.5,68.8]	[49.6,101.1]	[37.7,68.9]	0.544	0.505
	Median	6.0	6.0	5.0	6.0		
Duration of surgery, min	[interquartile range]	[5.0,7.0]	[5.0,7.0]	[5.0,6.0]	[5.0,7.0]	0.162	0.243
	Median	95.0	90.0	120.0	90.0		
Mean ropivacaine, mg/min	[interquartile range]	[75.0,120.0]	[70.0,115.0]	[100.0,130.0]	[73.8,120.0]	0.906	0.686
	Median	0.6	0.6	0.6	0.6		
[interquartile range]	[0.4,0.8]	[0.4,0.8]	[0.4,0.8]	[0.4,0.8]			
SNP: rs13281615 at 8q24							
Genotype		AA	AG	GG	AG+GG	p, three groups <sup>a</sup>	p, two groups <sup>b</sup>
<i>n</i>		100	215	102	317		
Age, year	Mean	49.1	49.0	50.3	49.4	0.526	0.764
	SD	10.9	9.7	10.6	10.0		
Height, cm	Mean	160.7	160.1	161.3	160.5	0.070	0.666
	SD	4.6	4.5	4.6	4.6		
Weight, kg	Mean	62.2	61.9	64.5	62.7	0.060	0.590
	SD	9.7	9.0	10.3	9.5		
BMI, kg/m <sup>2</sup>	Mean	24.0	24.2	24.8	24.4	0.253	0.418
	SD	3.4	3.4	3.4	3.4		
Initial lidocaine, mg	Median	66.5	66.5	66.5	66.5	0.806	0.584
	[interquartile range]	[66.5,66.5]	[66.5,66.5]	[66.5,66.5]	[66.5,66.5]		
Total ropivacaine, mg	Median	50.8	52.6	61.4	54.5	0.001	0.047
	[interquartile range]	[38.1,67.9]	[40.6,67.8]	[50.0,75.7]	[42.0,71.5]		
Onset of ropivacaine, min	Median	6.0	6.0	6.0	6.0	0.103	0.055
	[interquartile range]	[5.0,7.0]	[5.0,7.0]	[5.0,8.0]	[5.0,7.0]		
Duration of surgery, min	Median	100.0	90.0	105.0	90.0	0.163	0.573
	[interquartile range]	[75.0,120.0]	[75.0,120.0]	[80.0,120.0]	[75.0,120.0]		
Mean ropivacaine, mg/min	Median	0.5	0.6	0.6	0.6	0.003	0.003
	[interquartile range]	[0.4,0.7]	[0.4,0.8]	[0.5,0.8]	[0.5,0.8]		
SNP: rs2046210 at 6q25							
Genotype		GG	GA	AA	GA+AA	p, three groups <sup>a</sup>	p, two groups <sup>b</sup>
<i>n</i>		139	203	75	278		
Age, year	Mean	49.4	49.3	49.5	49.3	0.984	0.914
	SD	9.3	10.6	10.9	10.6		
Height, cm	Mean	160.8	160.5	160.1	160.4	0.620	0.434
	SD	4.2	4.8	4.5	4.7		
Weight, kg	Mean	62.9	62.4	62.7	62.5	0.888	0.690
	SD	10.4	9.4	8.5	9.1		
BMI, kg/m <sup>2</sup>	Mean	24.3	24.2	24.5	24.3	0.830	0.926
	SD	3.7	3.3	3.2	3.3		
Initial lidocaine, mg	Median	66.50	66.5	66.5	66.5	0.253	0.098
	[interquartile range]	[66.5,66.5]	[66.5,66.5]	[66.5,66.5]	[66.5,66.5]		
Total ropivacaine, mg	Median	55.4	52.0	56.3	52.8	0.053	0.359
	[interquartile range]	[42.5,68.8]	[39.8,66.7]	[46.7,76.5]	[40.9,69.3]		
Onset of ropivacaine, min	Median	6.0	6.0	6.0	6.0	0.730	0.429
	[interquartile range]	[5.0,7.0]	[5.0,7.0]	[5.0,8.0]	[5.0,7.0]		
Duration of surgery, min	Median	95.0	90.0	100.0	95.0	0.352	0.616
	[interquartile range]	[75.0,120.0]	[75.0,120.0]	[85.0,120.0]	[75.0,120.0]		
Mean ropivacaine, mg/min	Median	0.6	0.6	0.6	0.6	0.548	0.698
	[interquartile range]	[0.4,0.8]	[0.4,0.7]	[0.4,0.8]	[0.4,0.8]		

<sup>a</sup>Comparing the three genotype groups separately.

<sup>b</sup>A dominant model, comparing the group of homozygous patients for the nonrisk allele with the combined group of heterozygous patients and patients homozygous for the risk allele.

BMI, body mass index.