

Table S1. The baseline characteristics of subjects in the discovery stage

Variables	CRC vs. CON	
	CRC(%)	CON(%)
Total	n=184	n=184
Gender		P=1.000
Male	105(57.1)	105(57.1)
Female	79(42.9)	79(42.9)
Age		P=0.946
Mean±SD	61.1±10.8	61.1±10.8
Median	61.5	61.5
Range	30-88	29-85

Note: CRC, colorectal cancer; CON, control.

Table S2. The baseline characteristics of subjects in the validation stage

Variables	CRC(%)	CON(%)
Total	n=854	n=858
Gender		<i>P</i> =0.186
Male	580(67.9)	608(70.9)
Female	274(32.1)	250(29.1)
Age		<i>P</i> =0.145
Mean±SD	59.8±9.9	59.1±10.3
Median	60	58
Range	24-85	26-90
Smoking	n=850	n=611
		<i>P</i> =0.425
Ever Smoker	267(31.4)	204(33.4)
Never Smoker	583(68.6)	407(66.6)
Drinking	n=850	n=609
		<i>P</i> =0.630
Drinker	148(17.4)	112(18.4)
Non-drinker	702(82.6)	497(81.6)
<i>H.pylori</i> Infection	n=656	n=607
		<b><i>P</i>&lt;0.001</b>
Positive	351(53.5)	97(16.0)
Negative	305(46.5)	510(84.0)

Note: CRC, colorectal cancer; CON, control. The results are in bold if *P*<0.05.

Table S3. The association between NER SNPs and CRC risk in the discovery stage<sup>a</sup>

SNP genotypes	CRC(%)	CON(%)	P	OR(95%CI)
<b>DDB2</b>				
<b>rs2029298</b>				
GG	86(46.7)	80(43.7)		1(Ref)
GA	80(43.5)	82(44.8)	0.652	0.91(0.59-1.40)
AA	18(9.8)	21(11.5)	0.540	0.80(0.40-1.62)
GA+AA vs. GG			0.558	0.88(0.59-1.34)
AA vs. GA+GG			0.594	0.83(0.43-1.63)
<b>rs326222</b>				
TT	96(52.2)	90(49.2)		1(Ref)
TC	77(41.8)	82(44.8)	0.550	0.88(0.58-1.34)
CC	11(6.0)	11(6.0)	0.911	0.95(0.39-2.31)
TC+CC vs. TT			0.564	0.89(0.59-1.34)
CC vs. TC+TT			0.987	0.99(0.42-2.35)
<b>rs3781619</b>				
GG	26(14.1)	27(14.8)		1(Ref)
GA	83(45.1)	82(44.8)	0.891	1.04(0.56-1.94)
AA	75(40.8)	74(40.4)	0.867	1.06(0.56-1.98)
GA+AA vs. GG			0.859	1.05(0.59-1.89)
AA vs. GA+GG			0.947	1.01(0.67-1.54)
<b>rs830083</b>				
GG	28(15.2)	30(16.4)		1(Ref)
GC	83(45.1)	84(45.9)	0.883	1.05(0.58-1.91)
CC	73(39.7)	69(37.7)	0.672	1.14(0.62-2.11)
GC+CC vs. GG			0.752	1.10(0.62-1.92)
CC vs. GC+GG			0.694	1.09(0.71-1.66)
<b>ERCC1</b>				
<b>rs11615</b>				
CC	117(63.6)	104(56.8)		1(Ref)
CT	55(29.9)	72(39.3)	<b>0.085</b>	<b>0.68(0.44-1.06)</b>
TT	12(6.5)	7(3.8)	0.443	1.47(0.55-3.89)
CT+TT vs. CC			0.183	0.75(0.49-1.14)
TT vs. CT+CC			0.251	1.75(0.67-4.57)
<b>rs2298881</b>				
CC	65(35.3)	64(35.0)		1(Ref)
CA	84(45.7)	91(49.7)	0.686	0.91(0.58-1.44)
AA	35(19.0)	28(15.3)	0.523	1.22(0.66-2.24)
CA+AA vs. CC			0.932	0.98(0.64-1.51)
AA vs. CA+CC			0.347	1.30(0.75-2.24)
<b>rs3212955</b>				
AA	91(49.5)	91(49.7)		1(Ref)
AG	76(41.3)	70(38.3)	0.699	1.09(0.70-1.69)

	GG	17(9.2)	22(12.0)	0.427	0.75(0.37-1.52)
	AG+GG vs. AA			0.942	1.02(0.67-1.54)
	GG vs. AG+AA			0.392	0.75(0.38-1.46)
<b>rs3212961</b>					
	CC	51(27.7)	48(26.2)		1(Ref)
	CA	86(46.7)	100(54.6)	0.395	0.81(0.50-1.32)
	AA	47(25.5)	35(19.1)	0.476	1.24(0.69-2.24)
	CA+AA vs. CC			0.747	0.93(0.58-1.47)
	AA vs. CA+CC			0.143	1.45(0.88-2.38)
<b>rs3212986</b>					
	TT	19(10.3)	25(13.7)		1(Ref)
	TG	78(42.4)	70(38.3)	0.294	1.44(0.73-2.85)
	GG	87(47.3)	88(48.1)	0.399	1.34(0.68-2.62)
	TG+GG vs. TT			0.329	1.37(0.73-2.60)
	GG vs. TG+TT			0.863	0.96(0.64-1.46)
<b>rs735482</b>					
	CC	41(22.3)	33(18.0)		1(Ref)
	CA	85(46.2)	100(54.6)	0.173	0.69(0.40-1.18)
	AA	58(31.5)	50(27.3)	0.836	0.94(0.52-1.70)
	CA+AA vs. CC			0.312	0.77(0.46-1.28)
	AA vs. CA+CC			0.377	1.23(0.78-1.93)
<b>ERCC2</b>					
<b>rs1052555</b>					
	CC	168(91.3)	171(93.4)		1(Ref)
	CT	16(8.7)	12(6.6)	0.440	1.36(0.62-2.96)
<b>rs13181</b>					
	TT	162(88.0)	166(90.7)		1(Ref)
	TG	21(11.4)	17(9.3)	0.488	1.27(0.65-2.50)
	GG	1(0.5)	0(0.0)	NA	NA
	TG+GG vs. TT			0.403	1.33(0.68-2.60)
	GG vs. TG+TT			NA	NA
<b>rs238406</b>					
	GG	65(35.3)	55(30.1)		1(Ref)
	GT	80(43.5)	88(48.1)	0.286	0.77(0.48-1.24)
	TT	39(21.2)	40(21.9)	0.539	0.84(0.47-1.48)
	GT+TT vs. GG			0.286	0.79(0.51-1.22)
	TT vs. GT+GG			0.884	0.96(0.59-1.59)
<b>rs238417</b>					
	GG	63(34.2)	51(27.9)		1(Ref)
	GC	76(41.3)	89(48.6)	0.130	0.69(0.43-1.12)
	CC	45(24.5)	43(23.5)	0.679	0.89(0.50-1.56)
	GC+CC vs. GG			0.190	0.74(0.48-1.16)
	CC vs. GC+GG			0.817	1.06(0.65-1.71)
<b>rs50871</b>					

TT	87(47.3)	64(35.0)		1(Ref)
TG	81(44.0)	106(57.9)	<b>0.009</b>	<b>0.56(0.36-0.87)</b>
GG	16(8.7)	13(7.1)	0.867	0.93(0.41-2.11)
TG+GG vs. TT			<b>0.016</b>	<b>0.60(0.39-0.91)</b>
GG vs. TG+TT			0.576	1.25(0.58-2.68)
<b>rs50872</b>				
CC	109(59.6)	115(62.8)		1(Ref)
CT	69(37.7)	63(34.4)	0.495	1.16(0.76-1.79)
TT	5(2.7)	5(2.7)	0.982	1.02(0.28-3.66)
CT+TT vs. CC			0.517	1.15(0.75-1.75)
TT vs. CT+CC			0.993	0.99(0.28-3.51)
<b>ERCC3</b>				
<b>rs4150441</b>				
AA	36(19.6)	34(18.6)		1(Ref)
AG	82(44.6)	84(45.9)	0.664	0.88(0.50-1.55)
GG	66(35.9)	65(35.5)	0.906	0.97(0.54-1.73)
AG+GG vs. AA			0.801	0.94(0.55-1.58)
GG vs. AG+AA			0.933	1.02(0.66-1.57)
<b>rs4150448</b>				
GG	150(81.5)	155(84.7)		1(Ref)
GA	33(17.9)	25(13.7)	0.277	1.37(0.78-2.42)
AA	1(0.5)	3(1.6)	0.362	0.35(0.04-3.38)
GA+AA vs. GG			0.416	1.26(0.73-2.18)
AA vs. GA+GG			0.331	0.32(0.03-3.15)
<b>rs4150506</b>				
CC	90(48.9)	91(49.7)		1(Ref)
CT	77(41.8)	71(38.8)	0.686	1.09(0.71-1.69)
TT	17(9.2)	21(11.5)	0.573	0.82(0.40-1.65)
CT+TT vs. CC			0.882	1.03(0.68-1.56)
TT vs. CT+CC			0.487	0.79(0.40-1.55)
<b>ERCC4</b>				
<b>rs1799801</b>				
TT	113(61.4)	116(63.4)		1(Ref)
TC	62(33.7)	59(32.2)	0.738	1.08(0.69-1.68)
CC	9(4.9)	8(4.4)	0.789	1.14(0.43-3.08)
TC+CC vs. TT			0.695	1.09(0.71-1.66)
CC vs. TC+TT			0.811	1.13(0.43-2.99)
<b>rs2276464</b>				
GG	115(62.5)	117(63.9)		1(Ref)
GC	60(32.6)	59(32.2)	0.881	1.03(0.67-1.61)
CC	9(4.9)	7(3.8)	0.609	1.31(0.47-3.63)
GC+CC vs. GG			0.773	1.07(0.70-1.63)
CC vs. GC+GG			0.615	1.30(0.47-3.56)
<b>rs254942</b>				

TT	107(58.2)	111(61.0)		1(Ref)
TC	68(37.0)	63(34.6)	0.605	1.12(0.73-1.73)
CC	9(4.9)	8(4.4)	0.712	1.21(0.44-3.33)
TC+CC vs. TT			0.590	1.12(0.74-1.71)
CC vs. TC+TT			0.843	1.11(0.41-2.97)
<b>ERCC5</b>				
<b>rs1047768</b>				
CC	18(9.8)	20(10.9)		1(Ref)
CT	90(48.9)	69(37.7)	0.314	1.44(0.71-2.94)
TT	76(41.3)	94(51.4)	0.788	0.91(0.45-1.85)
CT+TT vs. CC			0.712	1.14(0.58-2.23)
TT vs. CT+CC			<b>0.054</b>	<b>0.66(0.44-1.01)</b>
<b>rs2094258</b>				
GG	77(41.8)	62(33.9)		1(Ref)
GA	86(46.7)	90(49.2)	0.248	0.77(0.49-1.20)
AA	21(11.4)	31(16.9)	<b>0.076</b>	<b>0.55(0.29-1.07)</b>
GA+AA vs. GG			0.117	0.71(0.47-1.09)
AA vs. GA+GG			0.133	0.63(0.35-1.15)
<b>rs2228959</b>				
CC	160(87.0)	169(92.3)		1(Ref)
CA	23(12.5)	14(7.7)	0.121	1.74(0.86-3.50)
AA	1(0.5)	0(0.0)	NA	NA
CA+AA vs. CC			<b>0.092</b>	<b>1.82(0.91-3.63)</b>
AA vs. CA+CC			NA	NA
<b>rs2296147</b>				
TT	93(50.5)	114(62.3)		1(Ref)
TC	81(44.0)	59(32.2)	<b>0.019</b>	<b>1.68(1.09-2.60)</b>
CC	10(5.4)	10(5.5)	0.687	1.21(0.48-3.06)
TC+CC vs. TT			<b>0.024</b>	<b>1.62(1.07-2.46)</b>
CC vs. TC+TT			0.981	0.99(0.40-2.44)
<b>rs4150291</b>				
AA	153(83.2)	150(82.0)		1(Ref)
AT	31(16.8)	32(17.5)	0.832	0.94(0.55-1.63)
TT	0(0.0)	1(0.5)	NA	NA
AT+TT vs. AA			0.752	0.92(0.53-1.58)
TT vs. AT+AA			NA	NA
<b>rs4150383</b>				
GG	165(89.7)	160(87.4)		1(Ref)
GA	19(10.3)	23(12.6)	0.505	0.80(0.42-1.53)
<b>rs751402</b>				
CC	87(47.3)	94(51.9)		1(Ref)
CT	79(42.9)	71(39.2)	0.408	1.20(0.78-1.85)
TT	18(9.8)	16(8.8)	0.613	1.21(0.58-2.53)
CT+TT vs. CC			0.375	1.21(0.80-1.82)

	TT vs. CT+CC		0.748	1.12(0.55-2.28)
<b>rs873601</b>				
GG	37(20.1)	59(32.2)		1(Ref)
GA	93(50.5)	88(48.1)	<b>0.041</b>	<b>1.69(1.02-2.81)</b>
AA	54(29.3)	36(19.7)	<b>0.005</b>	<b>2.35(1.30-4.25)</b>
GA+AA vs. GG			<b>0.009</b>	<b>1.89(1.17-3.05)</b>
AA vs. GA+GG			<b>0.032</b>	<b>1.70(1.05-2.76)</b>
<b>XPA</b>				
<b>rs10817938</b>				
TT	113(61.4)	106(57.9)		1(Ref)
TC	64(34.8)	71(38.8)	0.449	0.85(0.55-1.30)
CC	7(3.8)	6(3.3)	0.809	1.15(0.37-3.57)
TC+CC vs. TT			0.501	0.87(0.57-1.32)
CC vs. TC+TT			0.777	1.18(0.39-3.58)
<b>rs2808668</b>				
TT	43(23.4)	46(25.1)		1(Ref)
TC	90(48.9)	95(51.9)	0.934	1.02(0.62-1.70)
CC	51(27.7)	42(23.0)	0.384	1.30(0.72-2.33)
TC+CC vs. TT			0.698	1.10(0.68-1.77)
CC vs. TC+TT			0.298	1.29(0.80-2.06)
<b>rs3176629</b>				
CC	143(77.7)	153(83.6)		1(Ref)
CT	38(20.7)	28(15.3)	0.175	1.45(0.85-2.49)
TT	3(1.6)	2(1.1)	0.619	1.58(0.26-9.64)
CT+TT vs. CC			0.154	1.46(0.87-2.47)
TT vs. CT+CC			0.652	1.52(0.25-9.21)
<b>XPC</b>				
<b>rs1870134</b>				
GG	109(59.2)	100(54.6)		1(Ref)
GC	66(35.9)	74(40.4)	0.364	0.82(0.53-1.26)
CC	9(4.9)	9(4.9)	0.794	0.88(0.33-2.32)
GC+CC vs. GG			0.376	0.83(0.55-1.26)
CC vs. GC+GG			0.987	0.99(0.38-2.56)
<b>rs2228000</b>				
CC	77(41.8)	85(46.4)		1(Ref)
CT	92(50.0)	79(43.2)	0.250	1.29(0.84-1.98)
TT	15(8.2)	19(10.4)	0.695	0.86(0.41-1.82)
CT+TT vs. CC			0.378	1.20(0.80-1.82)
TT vs. CT+CC			0.462	0.77(0.38-1.56)
<b>rs2228001</b>				
AA	67(36.4)	67(36.6)		1(Ref)
CA	91(49.5)	95(51.9)	0.869	0.96(0.62-1.50)
CC	26(14.1)	21(11.5)	0.585	1.21(0.62-2.36)
CA+CC vs. AA			0.971	1.01(0.66-1.54)

CC vs. CA+AA

**rs2470352**

AA	184(100.0)	181(98.9)		1(Ref)
AT	0(0.0)	2(1.1)	NA	NA

**rs2607775**

CC	169(91.8)	166(90.7)		1(Ref)
CG	14(7.6)	16(8.7)	0.691	0.86(0.41-1.82)
GG	1(0.5)	1(0.5)	0.978	1.04(0.06-16.89)
CG+GG vs. CC			0.700	0.87(0.42-1.79)
GG vs. CG+CC			0.996	1.01(0.06-16.34)

Note: <sup>a</sup>,  $P$  was adjusted by gender and age; CRC, colorectal cancer; CON, control; OR, odds ratio; CI, confidence interval; NA, not available. The results are in bold if  $P<0.1$ .

Table S4. The association between NER SNPs and CRC risk stratified by host characteristics<sup>a</sup>

Variables	SNP genotypes	CRC/CON	P	OR(95%CI)
<b>DDB2</b>				
<b>rs2029298</b>				
Gender				
Male	GG	270/275		1(Ref)
	GA	245/266	0.555	0.93(0.73-1.19)
	AA	62/62	0.958	1.01(0.68-1.50)
	GA+AA vs. GG		0.635	0.95(0.75-1.19)
	AA vs. GA+GG		0.807	1.05(0.72-1.52)
Female	GG	123/110		1(Ref)
	GA	114/102	0.973	0.99(0.69-1.44)
	AA	35/34	0.733	0.91(0.53-1.56)
	GA+AA vs. GG		0.871	0.97(0.69-1.38)
	AA vs. GA+GG		0.718	0.91(0.55-1.52)
Age				
≤60	GG	197/227		1(Ref)
	GA	185/204	0.750	1.05(0.79-1.38)
	AA	54/48	0.959	1.01(0.66-1.54)
	GA+AA vs. GG		0.776	1.04(0.80-1.35)
	AA vs. GA+GG		0.965	0.99(0.66-1.48)
>60	GG	196/158		1(Ref)
	GA	174/164	0.301	0.85(0.63-1.15)
	AA	43/38	0.741	0.92(0.57-1.50)
	GA+AA vs. GG		0.323	0.87(0.65-1.15)
	AA vs. GA+GG		0.981	0.99(0.63-1.58)
<b>ERCC1</b>				
<b>rs11615</b>				
Gender				
Male	CC	359/349		1(Ref)
	CT	187/218	0.144	0.83(0.65-1.06)
	TT	30/35	0.452	0.82(0.49-1.37)
	CT+TT vs. CC		0.121	0.83(0.66-1.05)
	TT vs. CT+CC		0.601	0.87(0.53-1.45)
Female	CC	159/145		1(Ref)
	CT	106/87	0.481	1.14(0.79-1.64)
	TT	9/13	0.311	0.64(0.26-1.53)
	CT+TT vs. CC		0.680	1.08(0.76-1.53)
	TT vs. CT+CC		0.257	0.60(0.25-1.44)
Age				
≤60	CC	275/290		1(Ref)
	CT	142/173	0.292	0.86(0.65-1.14)
	TT	21/27	0.512	0.82(0.45-1.49)

	CT+TT vs. CC		0.259	0.86(0.66-1.12)
	TT vs. CT+CC		0.671	0.88(0.49-1.59)
>60	CC	243/204		1(Ref)
	CT	151/132	0.929	0.99(0.73-1.33)
	TT	18/21	0.286	0.70(0.36-1.35)
	CT+TT vs. CC		0.718	0.95(0.71-1.27)
	TT vs. CT+CC		0.291	0.71(0.37-1.35)
<b>rs735482</b>		836/838		
Gender				
Male	CC	113/126		1(Ref)
	CA	267/283	0.668	1.07(0.79-1.45)
	AA	189/186	0.456	1.13(0.82-1.57)
	CA+AA vs. CC		0.541	1.09(0.82-1.46)
	AA vs. CA+CC		0.545	1.08(0.84-1.38)
Female	CC	56/42		1(Ref)
	CA	138/120	0.574	0.87(0.55-1.40)
	AA	73/81	0.135	0.68(0.41-1.13)
	CA+AA vs. CC		0.312	0.80(0.51-1.24)
	AA vs. CA+CC		0.132	0.75(0.51-1.09)
Age				
≤60	CC	88/94		1(Ref)
	CA	211/240	0.643	0.92(0.65-1.31)
	AA	130/153	0.570	0.90(0.62-1.31)
	CA+AA vs. CC		0.594	0.92(0.66-1.27)
	AA vs. CA+CC		0.736	0.95(0.72-1.27)
>60	CC	81/74		1(Ref)
	CA	194/163	0.624	1.10(0.75-1.61)
	AA	132/114	0.637	1.10(0.73-1.66)
	CA+AA vs. CC		0.620	1.09(0.77-1.56)
	AA vs. CA+CC		0.985	1.00(0.73-1.36)
<b>ERCC2</b>				
<b>rs1052555</b>		852/851		
Gender				
Male	CC	519/528		1(Ref)
	CT	59/75	0.206	0.79(0.55-1.14)
	TT	1/0	NA	NA
	CT+TT vs. CC		0.237	0.80(0.56-1.15)
	TT vs. CT+CC		NA	NA
Female	CC	248/231		1(Ref)
	CT	25/16	0.253	1.46(0.76-2.82)
	TT	0/1	NA	NA
	CT+TT vs. CC		0.330	1.38(0.72-2.62)
	TT vs. CT+CC		NA	NA
Age				

<b>≤60</b>	CC	396/434	1(Ref)	
	CT	43/54	0.646	0.91(0.59-1.39)
	TT	0/1	NA	NA
	CT+TT vs. CC		0.569	0.88(0.58-1.35)
	TT vs. CT+CC		NA	NA
	CC	371/325	1(Ref)	
	CT	41/37	0.786	0.94(0.58-1.50)
<b>&gt;60</b>	TT	1/0	NA	NA
	CT+TT vs. CC		0.859	0.96(0.60-1.53)
	TT vs. CT+CC		NA	NA
<b>ERCC5</b>				
<b>rs1047768</b>				
Gender				
Male	CC	50/56	1(Ref)	
	CT	237/250	0.702	1.09(0.71-1.66)
	TT	285/295	0.596	1.12(0.74-1.70)
	CT+TT vs. CC		0.618	1.11(0.74-1.66)
	TT vs. CT+CC		0.803	1.03(0.82-1.30)
Female	CC	25/15	1(Ref)	
	CT	111/101	0.235	0.66(0.33-1.32)
	TT	131/128	0.163	0.61(0.31-1.22)
	CT+TT vs. CC		0.175	0.63(0.32-1.23)
	TT vs. CT+CC		0.474	0.88(0.62-1.25)
Age				
≤60	CC	36/37	1(Ref)	
	CT	174/202	0.551	0.86(0.52-1.42)
	TT	222/249	0.624	0.88(0.54-1.45)
	CT+TT vs. CC		0.585	0.87(0.54-1.42)
	TT vs. CT+CC		0.950	1.01(0.78-1.31)
>60	CC	39/34	1(Ref)	
	CT	174/149	0.939	0.98(0.59-1.64)
	TT	194/174	0.906	0.97(0.58-1.61)
	CT+TT vs. CC		0.926	0.98(0.60-1.59)
	TT vs. CT+CC		0.874	0.98(0.73-1.30)
<b>rs2094258</b>				
Gender				
Male	GG	206/248	1(Ref)	
	GA	279/268	0.087	1.25(0.97-1.60)
	AA	87/82	0.204	1.26(0.88-1.80)
	GA+AA vs. GG		0.068	1.25(0.98-1.58)
	AA vs. GA+GG		0.518	1.11(0.80-1.55)
Female	GG	101/78	1(Ref)	
	GA	130/124	0.300	0.82(0.55-1.20)
	AA	40/41	0.292	0.75(0.44-1.28)

	GA+AA vs. GG		0.233	0.80(0.56-1.15)
	AA vs. GA+GG		0.498	0.85(0.53-1.37)
<b>Age</b>				
≤60	GG	161/187		1(Ref)
	GA	202/227	0.980	1.00(0.75-1.33)
	AA	70/71	0.646	1.10(0.74-1.63)
	GA+AA vs. GG		0.861	1.02(0.78-1.34)
	AA vs. GA+GG		0.600	1.10(0.77-1.58)
>60	GG	146/139		1(Ref)
	GA	207/165	0.238	1.21(0.88-1.65)
	AA	57/52	0.824	1.05(0.68-1.64)
	GA+AA vs. GG		0.291	1.17(0.87-1.58)
	AA vs. GA+GG		0.834	0.96(0.64-1.44)
<b>rs2296147</b>		844/847		
<b>Gender</b>				
Male	TT	345/369		1(Ref)
	TC	203/205	0.518	1.08(0.85-1.39)
	CC	26/29	0.800	0.93(0.54-1.62)
	TC+CC vs. TT		0.602	1.07(0.84-1.35)
	CC vs. TC+TT		0.719	0.90(0.52-1.56)
Female	TT	163/148		1(Ref)
	TC	91/84	0.877	0.97(0.67-1.41)
	CC	16/12	0.630	1.21(0.55-2.66)
	TC+CC vs. TT		0.988	1.00(0.70-1.43)
	CC vs. TC+TT		0.608	1.22(0.57-2.65)
<b>Age</b>				
≤60	TT	264/296		1(Ref)
	TC	153/170	0.890	1.02(0.77-1.35)
	CC	18/23	0.700	0.88(0.46-1.68)
	TC+CC vs. TT		0.978	1.00(0.77-1.31)
	CC vs. TC+TT		0.678	0.87(0.46-1.65)
>60	TT	244/221		1(Ref)
	TC	141/119	0.738	1.05(0.78-1.43)
	CC	24/18	0.482	1.26(0.66-2.40)
	TC+CC vs. TT		0.617	1.08(0.80-1.45)
	CC vs. TC+TT		0.520	1.23(0.65-2.32)
<b>rs873601</b>		842/837		
<b>Gender</b>				
Male	GG	154/153		1(Ref)
	GA	298/289	0.733	1.05(0.80-1.39)
	AA	119/152	0.156	0.79(0.57-1.10)
	GA+AA vs. GG		0.763	0.96(0.74-1.25)
	AA vs. GA+GG		0.062	0.77(0.59-1.01)
Female	GG	76/70		1(Ref)

	GA	137/124	0.882	0.97(0.64-1.46)
	AA	58/49	0.739	1.09(0.66-1.80)
	GA+AA vs. GG		0.951	1.01(0.69-1.49)
	AA vs. GA+GG		0.698	1.09(0.71-1.67)
<b>Age</b>				
≤60	GG	117/121		1(Ref)
	GA	228/240	0.940	0.99(0.72-1.35)
	AA	89/121	0.192	0.78(0.54-1.13)
	GA+AA vs. GG		0.589	0.92(0.68-1.24)
	AA vs. GA+GG		0.139	0.79(0.58-1.08)
>60	GG	113/102		1(Ref)
	GA	207/173	0.865	1.03(0.73-1.45)
	AA	88/80	0.915	0.98(0.65-1.47)
	GA+AA vs. GG		0.923	1.02(0.74-1.40)
	AA vs. GA+GG		0.753	0.95(0.67-1.34)
<b>XPA</b>				
<b>rs10817938</b>		823/822		
<b>Gender</b>				
Male	TT	344/385		1(Ref)
	TC	181/172	0.330	1.14(0.88-1.47)
	CC	37/23	<b>0.020</b>	<b>1.91(1.11-3.29)</b>
	TC+CC vs. TT		0.105	1.22(0.96-1.56)
	CC vs. TC+TT		<b>0.031</b>	<b>1.81(1.06-3.10)</b>
Female	TT	167/162		1(Ref)
	TC	78/69	0.578	1.12(0.76-1.66)
	CC	16/11	0.383	1.43(0.64-3.17)
	TC+CC vs. TT		0.438	1.16(0.80-1.68)
	CC vs. TC+TT		0.408	1.40(0.63-3.08)
<b>Age</b>				
≤60	TT	262/327		1(Ref)
	TC	127/125	0.112	1.27(0.95-1.72)
	CC	29/23	0.099	1.62(0.91-2.89)
	TC+CC vs. TT		<b>0.048</b>	<b>1.33(1.00-1.75)</b>
	CC vs. TC+TT		0.156	1.51(0.86-2.66)
>60	TT	249/220		1(Ref)
	TC	132/116	0.888	1.02(0.75-1.40)
	CC	24/11	0.070	1.98(0.95-4.15)
	TC+CC vs. TT		0.514	1.11(0.82-1.49)
	CC vs. TC+TT		0.068	1.98(0.95-4.13)
<b>XPC</b>				
<b>rs2607775</b>		840/850		
<b>Gender</b>				
Male	CC	512/565		1(Ref)
	CG	59/36	<b>0.007</b>	<b>1.83(1.18-2.82)</b>

	GG	3/2	0.487	1.90(0.31-11.52)
	CG+GG vs. CC		<b>0.005</b>	<b>1.83(1.20-2.79)</b>
	GG vs. CG+CC		0.520	1.81(0.30-10.97)
Female	CC	243/227		1(Ref)
	CG	21/20	0.949	1.02(0.54-1.94)
	GG	2/0	NA	NA
	CG+GG vs. CC		0.741	1.11(0.59-2.09)
	GG vs. CG+CC		NA	NA
Age				
$\leq 60$	CC	388/461		1(Ref)
	CG	40/27	<b>0.017</b>	<b>1.87(1.12-3.11)</b>
	GG	5/1	NA	NA
	CG+GG vs. CC		<b>0.005</b>	<b>2.02(1.23-3.32)</b>
	GG vs. CG+CC		NA	NA
>60	CC	367/331		1(Ref)
	CG	40/29	0.322	1.29(0.78-2.14)
	GG	0/1	NA	NA
	CG+GG vs. CC		0.392	1.24(0.76-2.05)
	GG vs. CG+CC		NA	NA

Note: <sup>a</sup>,  $P$  was adjusted by the other factor of gender and age; CRC, colorectal cancer; CON, control; OR, odds ratio; CI, confidence interval; NA, not available. The results are in bold if  $P < 0.05$ .

Table S5. The association between haplotypes of NER SNPs and CRC risk

Haplotypes	CRC(%)	CON(%)	P	OR(95%CI)
<b>ERCC1<sup>a</sup></b>				
C-A	584.58(35.1)	567.92(34.0)	0.528	1.05(0.91-1.21)
C-C	715.42(42.9)	709.08(42.5)	0.804	1.02(0.89-1.17)
T-A	341.42(20.5)	366.08(21.9)	0.302	0.92(0.78-1.08)
<b>ERCC5<sup>b</sup></b>				
C-G-C-A	286.17(17.4)	306.80(18.7)	0.342	0.92(0.77-1.10)
C-G-C-G	64.05(3.9)	44.10(2.7)	0.051	1.47(1.00-2.17)
C-G-T-G	122.19(7.5)	110.32(6.7)	0.422	1.12(0.85-1.46)
T-A-T-G	603.94(36.8)	584.37(35.6)	0.481	1.05(0.91-1.22)
T-G-T-A	419.46(25.6)	435.46(26.6)	0.514	0.95(0.81-1.11)
T-G-T-G	77.36(4.7)	91.00(5.5)	0.278	0.84(0.62-1.15)

Note: Haplotypes for <sup>a</sup>, rs11615-rs735482; Haplotypes for <sup>b</sup>, rs1047768-rs2094258-rs2296147-rs873601; CRC, colorectal cancer; CON, control; OR, odds ratio; CI, confidence interval. The results are in bold if  $P < 0.05$ .