

Article

STOP Pain Project—Opioid Response in Pediatric Cancer Patients and Gene Polymorphisms of Cytokine Pathways

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Table S1. Distribution of the SNPs in eight genes in the studied population.

Gene	N *	%	Hardy-Weinberg (<i>p</i> -Value)	MAF °
IL6 rs1800795				
GG	35	47.30	0.720	0.416
GC	30	40.54		
CC	9	12.16		
IL-6 rs1800796				
GG	63	85.13	0.930	0.048
GC	11	14.86		
CC	0	0		
IL-6 rs1800797				
AA	8	10.81	0.950	0.408
AG	29	39.19		
GG	37	50.00		
IL8 rs4073				
TT	24	32.43	0.950	0.421
TA	30	40.54		
AA	20	27.03		
TNFα rs1800629				
GG	63	85.13	0.930	0.134
GA	11	14.86		
AA	0	0		

* All patients have Caucasian origins. ° European Population of 1000 Genomes Project data (dbSNP-1000Genome-EUR).

Table S2. Association between genetic factors and safety outcomes after opioid treatment.

	ADRs		Gastrointestinal		SNC	
	N Yes/No	OR (95% CI)	N Yes/No	OR (95% CI)	N Yes/No	OR (95% CI)
IL-6 rs1800795						
Co-dominant						
C/C	3/6	1	2/7	1	1/8	1

G/C	9/21	0.76 (0.134–4.282)	8/22	1.21 (0.181–8.106)	3/27	0.18 (0.004–8.050)
G/G	12/23	0.53 (0.083–3.377)	9/26	1.03 (0.137–7.678)	4/31	0.01 (0.00–1.439)
Dominant						
C/C	3/6	1	2/7	1	1/8	1
G/C+G/G	21/44	0.66 (0.125–3.430)	17/48	1.13 (0.183–7.042)	7/58	0.07 (0.001–3.604)
Recessive						
C/C+G/C	12/27	1	10/29	1	4/35	1
G/G	12/23	0.66 (0.180–2.387)	9/26	1.29 (0.396–4.253)	4/31	0.03 (0.00–1.716)
IL-6 rs1800796						
Co-dominant						
G/C	3/8	1	2/9	1	1/10	1
G/G	21/42	1.58 (0.303–8.225)	17/46	2.10 (0.332–13.249)	7/56	2.23 (0.099–49.893)
IL-6 rs1800797						
Co-dominant						
A/A	3/5	1	2/6	1	1/7	1
A/G	9/20	0.64 (0.102–4.028)	7/22	0.85 (0.112–6.521)	4/25	0.24 (0.006–8.909)
G/G	12/25	0.42 (0.01–2.879)	10/27	0.87 (0.108–7.065)	3/34	0.01 (0.00–1.074)
Dominant						
A/A	3/5	1	2/6	1	1/7	1
G/G+ A/G	21/45	0.09 (0.02–3.584)	17/49	0.86 (0.125–5.979)	7/59	0.09 (0.002–3.584)
Recessive						
G/G	12/25	1	10/27	1	3/34	1
A/G+ A/A	12/25	1.68 (0.466–6.084)	9/28	1.01 (0.295–3.860)	5/32	35.93 (0.990–1304.652)
IL-8- rs4073						
Co-dominant						
A/A	8/12	1	7/13	1	1/19	1
A/T	13/17	1.38 (0.374–5.117)	12/18	1.30 (0.333–5.082)	4/26	NA
T/T	3/21	NA	0/24	-	3/21	NA
Dominant						
A/A	8/12	1	7/13	1	1/19	1
A/T+T/T	16/38	0.74	12/42	0.54	7/47	NA

(0.220–2.465)			(0.152–1.940)			
Recessive						
A/A+A/T	21/29	1	19/31	1	5/45	1
T/T	3/21	0.18 (0.038–0.819)	0/24	1.19 (0.319–4.422)	3/21	4.24 (0.412–43.539)
TNFα rs1800629						
Co-dominant						
A/G	4/7	1	3/8	1	1/10	1
G/G	20/43	0.81 (0.174–3.738)	16/47	1.07 (0.202–5.621)	7/56	0.68 (0.049–9.402)

Analysis adjusted for: age class, gender, Pi_{tt}, diagnosis, metastasis. NA: not assessable.