

**Table S1.** Association between VAS scores and various types of cancer groups.

		N	Mean	Std. Deviation	<i>p</i>
VAS scores	Urogenital	6	3.33	3.011	0.874
	Lung	15	2.73	2.520	
	Breast	16	3.31	3.219	
	Prostate	4	3.38	3.902	
	Gastrointestinal tract	20	4.58	3.006	
	Gynecologic	6	2.67	3.204	
	Hematologic	9	3.67	3.240	
	Sarcoma	2	3.50	4.950	
	Head and neck	2	2.50	3.536	
	Pancreas	4	2.25	2.062	
	Others	5	2.80	1.924	

**Table S2.** Association between morphine doses and various types of cancer groups.

		N	Mean	Std. Deviation	<i>p</i>
Morphine Doses	Urogenital	6	26.6667	14.11264	0.129
	Lung	15	33.1667	28.16512	
	Breast	16	44.6875	41.56195	
	Prostate	4	20.4000	6.73102	
	Gastrointestinal tract	20	30.4980	17.35949	
	Gynecologic	6	22.3600	26.07983	
	Hematologic	9	36.2000	27.94231	
	Sarcoma	2	83.3000	23.61737	
	Head and neck	2	18.7500	15.90990	
	Pancreas	4	73.1250	92.54222	
	Others	5	15.0000	5.30330	

**Table S3.** Association between treatment duration and various types of cancer groups.

		N	Mean	Std. Deviation	<i>p</i>
Treatment duration	Urogenital	6	75.33	122.469	0.111
	Lung	13	16.23	14.805	
	Breast	16	240.12	571.990	
	Prostate	4	32.50	27.923	
	Gastrointestinal tract	20	77.90	171.702	
	Gynecologic	5	30.80	34.215	
	Hematologic	9	100.33	169.801	
	Sarcoma	2	196.00	219.203	
	Head and neck	2	7.00	2.828	
	Pancreas	3	866.33	1465.108	
	Others	5	22.40	39.532	

**Table S4.** Association between VAS scores and different demographic and genetic factors.

	N	Mean VAS Scores	Std. Deviation	<i>p</i>
<b>Sexe</b>				0.960
Men	46	3.34	2.864	
Women	43	3.48	3.026	
<b>COMT SNP</b>				0.541
ValMet/MetMet	66	3.27	2.924	
ValVal	23	3.78	2.969	
<b>ABCB1 SNP</b>				0.664
CT/TT	60	3.30	2.860	
CC	29	3.62	3.101	
<b>OPRM1 SNP</b>				0.224
AA	69	3.61	2.948	
AG	20	2.70	2.812	
<b>Metastasis</b>				0.476
Oui	62	3.37	3.049	
Non	27	3.48	2.680	
<b>Concomitant opioids use</b>				0.218
Oui	6	4.83	2.229	
Non	83	3.30	2.955	
<b>Concomitant use of other drugs</b>				0.388
Oui	64	3.59	3.070	
Non	25	2.92	2.515	

**Table S5.** Association between VAS scores and age, weight, creatinine clearance, treatment duration, morphine dose and duration since the beginning of treatment.

		VAS scores
Age	Correlation Coefficient	-.125
	-p-value	.242
	N	89
Weight	Correlation Coefficient	.058
	Sig. (2-tailed)	.590
	N	89
Creatinine clearance	Correlation Coefficient	-.100
	Sig. (2-tailed)	.352
	N	88
Treatment duration	Correlation Coefficient	-.052
	Sig. (2-tailed)	.635
	N	85
Morphine dose	Correlation Coefficient	.092
	Sig. (2-tailed)	.390
	N	89
Duration since diagnosis	Correlation Coefficient	-.047
	Sig. (2-tailed)	.669
	N	85

**Table S6.** The PCR protocol and conditions for *OPRM1*, *COMT* and *ABCB1* genotyping.

	PCR				FUSION CURVES	
OPRM1 C.118A>G	5 s à	10 s à	15 s à	45 cycles	95 s à	De 40°C à 85°C à
	95°C	55°C	72°C		40°C	0,2°C/s
COMT P.VAL158MET	5 s à	10 s à	15 s à	45 cycles	95 s à	De 40°C à 85°C à
	95°C	60°C	72°C		40°C	0,2°C/s
ABCB1 C.3435C>T	5 s à	10 s à	15 s à	45 cycles	95 s à	De 40°C à 85°C à
	95°C	54°C	72°C		40°C	0,2°C/s

**Table S7.** The EORTC-QLQ-C30 version 1.0 with functional / symptom scales indicated.

	SCALE	NO	YES
1. Do you have any trouble doing strenuous activities, like carrying a heavy shopping bag or a suitcase?	Physical	1	2
2. Do you have any trouble taking a <b>long</b> walk?	Physical	1	2
3. Do you have any trouble take a <b>short</b> walk outside of the house?	Physical	1	2
4. Do have to stay in bed or a chair for most of the day?	Physical	1	2
5. Do you need help with eating, dressing, washing yourself or using the toilet?	Physical	1	2
6. Are you limited in any way in doing either your work or doing household jobs?	Role	1	2
7. Are you completely unable to work at a job or to do household jobs?	Role	1	2

  

During the past week:	SCALE	Not at all	A little	Quite a bit	Very much
8. Were you short of breath?	Dyspnoea	1	2	3	4
9. Have you had pain?	Pain	1	2	3	4
10. Did you need rest?	Fatigue	1	2	3	4
11. Have you had trouble sleeping?	Insomnia	1	2	3	4
12. Have you felt weak?	Fatigue	1	2	3	4
13. Have you lacked appetite?	Appetite Loss	1	2	3	4
14. Have you felt nauseated?	Nausea and Vomiting	1	2	3	4
15. Have you vomited?	Nausea and Vomiting	1	2	3	4

  

During the past week:	SCALE	Not at all	A little	Quite a bit	Very much
16. Have you been constipated?	Constipation	1	2	3	4
17. Have you had diarrhoea?	Diarrhoea	1	2	3	4
18. Were you tired?	Fatigue	1	2	3	4
19. Did pain interfere with you daily activities?	Pain	1	2	3	4
20. Have you had difficulty in concentrating on things, like reading a newspaper or watching television?	Cognitive	1	2	3	4
21. Did you feel tense?	Emotional	1	2	3	4
22. Did you worry?	Emotional	1	2	3	4
23. Did you feel irritable?	Emotional	1	2	3	4
24. Did you feel depressed?	Emotional	1	2	3	4
25. Have you had difficulty remembering things?	Cognitive	1	2	3	4
26. Has your physical condition or medical treatment interfered with your <b>family</b> life?	Social	1	2	3	4
27. Has your physical condition or medical treatment interfered with your <b>social</b> activities?	Social	1	2	3	4
28. Has your physical condition or medical treatment caused you financial difficulties?	Financial Difficulties	1	2	3	4

  

GLOBAL HEALTH STATUS						
29. How would you rate your overall <b>physical condition</b> during the past week?						
1 Very poor	2	3	4	5	6	7 Excellent
30. How would you rate your overall <b>quality of life</b> during the past week?						
1 Very poor	2	3	4	5	6	7 Excellent