

**Web Table 1.** Basic cost-assumptions for the economic analysis. #

variable cost component	price (\$)	unit
<b><u>preoperative</u></b>		
Premedication		
diazepam	0.60	10 mg = 1 tablet
	0.27	1 mg = 1 tablet
atropine	0.68	0.5 mg = 1 ml
lorazepam	0.11	1 mg = 1 tablet
midazolam	0.13	1 mg = 1 tablet
temazepam	0.11	10 mg = 1 tablet
<b><u>intraoperative</u></b>		
thiopental	1.51	500 mg vial
propofol	5.61	200 mg vial
	14.40	syringe of 500 mg
isoflurane	0.14	1 g = 0.67 ml
nitrous oxide	0.005	liter
lidocaine	0.26	10 ml vial 1%
Opioids		
fentanyl	0.87	0.5 mg = 10 ml
sufentanil	2.26	50 µg = 10 ml
alfentanil	3.61	5 mg = 10 ml
morphine	0.23	10 mg = 1ml

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Muscle relaxants

succinylcholine	0.72	10 mg = 1 ml
mivacurium	6.51	20 mg = 10 ml
atracurium	3.55	50 mg = 5 ml
vecuronium	6.83	10 mg = 5 ml
rocuronium	6.44	50 mg = 5 ml
cisatracurium	5.16	10 mg = 5 ml

Antagonists

naloxone	0.76	0.4 mg = 1 ml
neostigmine	0.25	0.5 mg = 1 ml
atropine	0.24	0.5 mg = 1 ml
glycopyrrolate	1.27	0.2 mg = 1 ml

**postoperative**

Antiemetics

droperidol	0.38	5 mg = 2ml
metoclopramide	0.12	10 mg = 1 tablet
ondansetron	7.20	twice 4 mg = 2 ml

**fixed costs per surgical session (only intra-operative)**

infusion-pump & stop-cock & lines	1.24
vaporizer	1.54
O <sub>2</sub> /N <sub>2</sub> O fail-safe device	1.24
gas-analyzer	7.70
gas evacuation on ventilator	0.32

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# prices per 1-7-1998

**Web Table 2.**

Patient Ratings of PONV and anesthesia 24 hours and 14 days postoperatively. \*

	INPATIENTS			OUTPATIENTS		
	Isoflurane	TIVA	p-value	Isoflurane	TIVA	p-value
<b>24 HOUR RATINGS</b>	(N=700)	(N=701)		(N=276)	(N=270)	
<b>nausea †</b>						
median (10th-90th percentile)	0 (0-7)	0 (0-6)	< 0.001	0 (0-5)	0 (0-5)	0.006
% responding zero	58	70		70	80	
<b>retching</b>						
median (10th-90th percentile)	0 (0-6)	0 (0-4)	< 0.001	0 (0-2)	0 (0-0)	0.001
% responding zero	77	86		85	94	
<b>vomiting</b>						
median (10th-90th percentile)	0 (0-7)	0 (0-5)	< 0.001	0 (0-3)	0 (0-0)	0.063
% responding zero	69	79		87	92	
<b>anesthetic experience ‡</b>						
median (10th-90th percentile)	9 (7-10)	9 (8-10)	< 0.001	9 (7-10)	9 (8-10)	0.055
<b>14 DAY RATINGS</b>	(N=655)	(N=637)		(N=244)	(N=237)	
<b>nausea †</b>						
median (10th-90th percentile)	0 (0-4)	0 (0-3)	0.034	0 (0-3)	0 (0-2)	0.04
% responding zero	72	78		77	84	

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<b>retching</b>						
median (10th-90th percentile)	0 (0-2)	0 (0-1)	0.383	0 (0-1)	0 (0-0)	0.402
% responding zero	85	87		89	91	

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**Web Table 2 (continued).**

Patient Ratings of PONV and anesthesia 24 hours and 14 days postoperatively. \*

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	INPATIENTS			OUTPATIENTS		
	Isoflurane	TIVA	p-value	Isoflurane	TIVA	p-value
<b>vomiting</b>						
median (10th-90th percentile)	0 (0-0)	0 (0-0)	0.488	0 (0-0)	0 (0-0)	0.503
% responding zero	90	91		94	95	
<b>anesthetic experience ‡</b>						
median (10th-90th percentile)	9 (6-10)	10 (7-10)	0.007	8 (5-10)	9 (7-10)	< 0.001

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**Legend web table 2.**

\* Group isoflurane: inhalational anesthesia with thiopental, isoflurane and nitrous oxide for inpatients, or propofol induction, isoflurane and nitrous oxide for outpatients. Group TIVA: total intravenous anesthesia with propofol/air. Differences between isoflurane and TIVA tested according to Mann-Whitney.

† Patient ratings for nausea, retching and vomiting were on a scale from zero (no discomfort from nausea, retching or vomiting) to ten (severest discomfort). At 24 hours patients were asked to rate discomfort from nausea, retching and vomiting since discharge from the recovery room. Ratings after 14 days pertained to the preceding 11 days.

‡ Ratings for the anesthetic experience were on a scale from ten (best experience) to

zero (worst experience).

**Web Table 3.** Median costs and 10<sup>th</sup> - 90<sup>th</sup> percentile in US\$ (1 US\$ = 2 Dfl) of anesthesia according to type of anesthesia received. \*

	<b>inpatients</b>				<b>outpatients</b>			
	<b>isoflurane</b>		<b>TIVA</b>		<b>isoflurane</b>		<b>TIVA</b>	
<b><u>preoperative</u></b>								
premedication	0.11	(0.00 - 0.27)	0.13	(0.00 - 0.27)	0.00	(0.00 - 0.00)	0.00	(0.00 - 0.00)
<b><u>intraoperative</u></b>								
hypnotics †	10.84	(5.67 - 22.64)	39.53	(19.89 - 75.74)	13.10	(8.51 - 20.18)	28.31	(19.89 - 47.69)
opioids	0.29	(0.29 - 3.55)	0.58	(0.29 - 3.55)	0.29	(0.29 - 3.55)	0.29	(0.29 - 3.55)
relaxants	6.44	(3.55 - 12.88)	6.44	(1.04 - 12.88)	6.44	(0.00 - 6.83)	6.44	(0.00 - 6.83)
antagonists	0.00	(0.00 - 3.02)	0.00	(0.00 - 2.78)	0.00	(0.00 - 0.76)	0.00	(0.00 - 0.76)
<b><i>total costs based on anesthetics</i></b>	<b><i>19.46</i></b>	<b><i>(12.68- 34.76)</i></b>	<b><i>48.44</i></b>	<b><i>(29.60 - 86.47)</i></b>	<b><i>20.08</i></b>	<b><i>(12.81 - 28.32)</i></b>	<b><i>34.95</i></b>	<b><i>(23.73 - 54.42)</i></b>
fixed costs per surgical session ‡	10.7		2.0		10.7		2.0	
<b><u>postoperative</u></b>								
costs of antiemetics (72 hours)	0.00	(0.00 - 0.22)	0.00	(0.00 - 0.11)	0.00	(0.00 - 0.11)	0.00	(0.00 - 0.00)
length of hospitalization (days)	3	(1 - 9)	3	(1 - 10)	0	(0 - 0)	0	(0 - 0)
return to work (days)	14	(9 - 21)	14	(3 - 28)	11	(3 - 19)	10	(4 - 20)

**Legend web table 3.**

- \* Group isoflurane: inhalational anesthesia with isoflurane and nitrous oxide. Group TIVA: total intravenous anesthesia with propofol/air.
- † For group isoflurane inpatients the hypnotics included thiopental, isoflurane, and nitrous oxide. Hypnotics for group isoflurane outpatients: propofol plus lidocaine (if used), isoflurane, and nitrous oxide. Hypnotics for inpatients and outpatients in group TIVA consisted of propofol plus lidocaine (if used).
- ‡ For group isoflurane: scavenging equipment in the operating room, vaporizer, O<sub>2</sub>/N<sub>2</sub>O fail-safe device (oxygen pressure failure device), and gas-analyzer. For group TIVA: infusion pump, stopcock and lines.

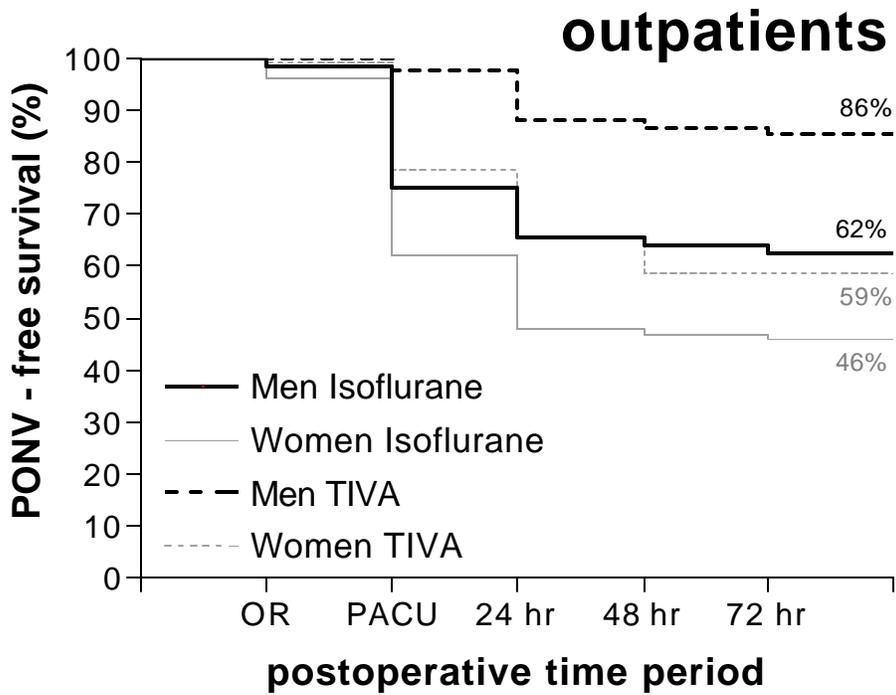
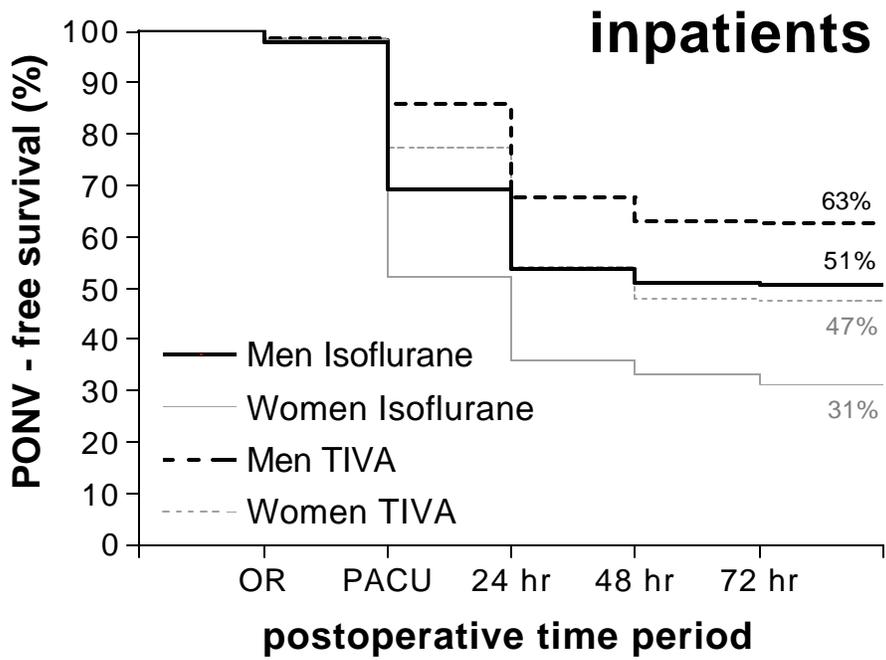
**Web figure 1.** Survival without Postoperative Nausea and Vomiting (PONV) According to Anesthetic Technique and Gender.

Isoflurane patients received inhalational anesthesia with isoflurane/nitrous oxide, after induction with thiopental (inpatients) or propofol (outpatients); TIVA patients received total intravenous anesthesia with propofol/air for induction and maintenance. OR = operating room directly after emergence from anesthesia; PACU = Post Anesthetic Care Unit or daycare unit, as applicable; 24 hr = 24 hours postoperatively; 48 hr = 48 hours postoperatively and 72 hr = 72 hours postoperatively.

**Web figure 2.** Time to readiness for discharge according to anesthetic technique.

Inpatients in group isoflurane received anesthesia induction with thiopental, maintenance was performed with isoflurane/nitrous oxide. Outpatients in the isoflurane group received anesthesia induction with propofol, and maintenance with isoflurane/nitrous oxide. Inpatients and outpatients group TIVA received induction and maintenance of anesthesia with propofol/air.

Web figure 1.



Web figure 2.

