

1 Table. S3. Preliminary analysis of combining minocycline and irinotecan regimen indicates
 2 significant cost savings compared to other irinotecan-based combination therapies.

Drug	Minocycline + Irinotecan		Bevacizumab + Irinotecan		Etoposide + Irinotecan	
	Minocycline	Irinotecan	Bevacizumab	Irinotecan	Etoposide	Irinotecan
Standard dose	100 mg/day	218 mg ^c	375 mg ^g	105 mg	50 mg ⁱ	105 mg
Cost per dose	\$0.50 ^a	\$133 ^d	\$2,700 ^a	\$66	\$12 ^a	\$66
# of treatments	180 ^b	24 ^e	12 ^g	18	168 ^j	16
Total cost of drug	\$90	\$3,192	\$32,400^h	\$1,188^h	\$2,016^k	\$1,056^k
Avg. cost of admin.	\$0	\$70 ^f		\$70		\$70
Total cost of admin.	\$0	\$420		\$420		\$580
Rate of grade 3-4 side effects (%)*						
Neutropenia	0	31.4		11.5		52.4
Thrombocytopenia	0	1.7		3.8		2.4
Febrile Neutropenia	0	5.8				7.1
Cramp/nausea	0	16.1		3.8		11.9
Diarrhea	0	31		3.8		4.8
Vomiting	0	12.1		3.8		7.1
Cost of side effect management*	\$0	\$3,012		\$1,066		\$4,129
Total cost of therapy		\$6,702		\$35,074		\$7,781

Doses were calculated for a 1.75 m² patient. Unused portions of chemotherapy vials were discarded in calculations. Cost for administering chemo IV was conservatively fixed at \$70 per cycle. Minocycline was assumed to be taken orally at a dose of 100 mg/day; however, dose could be escalated to 200 mg/day while maintaining safety and low cost. Broken down costs were calculated for minocycline only, total cost was calculated as full dose Irinotecan + cost for minocycline over a full chemotherapy schedule. Irinotecan monotherapy was calculated for 125 mg/m², 4 doses per cycle for 6 cycles. Bevacizumab and Etoposide combination regimens both used 60 mg/m² for up to 6 cycles.

*See toxicity related costs file (Table S4)

^a Online pharmacy price (2017)

^b One per day for 6 months

^c FDA product label—125 mg/m² for 1.75 m² person

^d 6 vials of 40 mg, \$22/vial

^e 4 treatments/cycle (FDA label) for 6 cycles

^f Table 1; Daniel Ruiz-Sánchez *et al.* Cost-effectiveness analysis of the bevacizumab-irinotecan regimen in the treatment of primary glioblastoma multiforme recurrences. *Oncol Lett.* 2016 Sep; 12(3): 1935–1940.

^g 5 mg/kg, 75 kg person – Ying Liu *et al.* Low-dose-intensity bevacizumab with weekly irinotecan for platinum- and taxanes-resistant epithelial ovarian cancer. *Cancer Chemother Pharmacol.* 2015; 75(3): 645–651.

^h Follow same regimen as (g)—two Bevacizumab treatments per cycle, 3 Irinotecan treatments of 60 mg/m² per cycle (1.75 m² person, 40 mg/vial, \$22/vial), for up to 6 cycles (\$32,400 from Bevacizumab alone)

ⁱ Shoji T *et al.* Phase II clinical study of the combination chemotherapy regimen of irinotecan plus oral etoposide for the treatment of recurrent ovarian cancer. *Int J Gynecol Cancer.* 2011 Jan;21(1):44-50.

^j Schedule from (i)—one dose on days 1-21, 28 day cycles, average of 8 cycles

^k Same regimen as (i)—follow etoposide schedule, 2 irinotecan treatments of 60 mg/m² per cycle (1.75 m² person, 40 mg/vial, \$22/vial) for 8 cycles (\$2,016 from etoposide alone)