

Colorectal Cancer: Pathway to Survival

List of Chemotherapeutic Regimens

Disclosure

- This table describes the regimens based on the NCCN guidelines for colon and rectal cancers and is for informational purposes only.
- Primary references and full prescribing information should be consulted when making patient care decisions.
- Clinicians have the professional responsibility to ensure that drugs are prescribed and used appropriately, based on their own clinical judgment and accepted standards of care.

Name	Regimen	Reference
Adjuvant Therapy for Colon Cancer		
Capecitabine	1,250 mg/m ² PO in 2 divided doses, days 1 through 14 <i>Repeat every 3 weeks x 24 weeks</i>	Twelves et al. <i>N Engl J Med.</i> 2005;352:2696-2704.
5-FU/LV	LV 500 mg/m ² IV over 2 hours <i>Repeat every week x 6 cycles</i> 5-FU IV bolus 1 hour after start of LV repeated x 6 weekly <i>Repeat every 8 weeks x 4 cycles</i>	Haller et al. <i>J Clin Oncol.</i> 2005;23:8671-8678.
5-FU/LV	5-FU 370-400 mg/m ² + LV 200 mg/m ² IV daily x 5 days <i>Repeat every 28 days x 6 cycles</i>	IMPACT trial investigators. <i>Lancet.</i> 1995;345:939-944.
FLOX	Oxaliplatin 85 mg/m ² IV over 2 hours, days 1, 15, 29 LV 500 mg/m ² IV, days 1, 8, 15, 22, 29, 36 5-FU 500 mg/m ² IV bolus, days 1, 8, 15, 22, 29, 36 <i>Repeat every 8 weeks for 3 cycles</i>	Kuebler et al. <i>J Clin Oncol.</i> 2007;25:2198-2204.
FOLFOX4	Oxaliplatin 85 mg/m ² IV over 2 hours, day 1 LV 200 mg/m ² IV over 2 hours, days 1 and 2 5-FU 400 mg/m ² IV bolus, then 600 mg/m ² IV over 22 hours, days 1 and 2 <i>Repeat every 2 weeks</i>	André et al. <i>N Engl J Med.</i> 2004;350:2343-2351. de Gramont et al. 2005 ASCO GI Cancers Symposium. Abstract 167.
mFOLFOX6*	Oxaliplatin 85 mg/m ² IV over 2 hours, day 1 LV 400 mg/m ² IV over 2 hours, day 1 5-FU 400 [†] mg/m ² IV bolus, then 1,200 mg/m ² IV days 1,2 or 2400 mg/m ² over 46 hours <i>Repeat every 2 weeks</i>	Cheeseman et al. <i>Br J Cancer.</i> 2002;87:393-399.
Adjuvant Therapy for Rectal Cancer		
Postoperative for patients receiving preoperative chemotherapy/RT		
5-FU/LV	5-FU 380 mg/m ² + LV 20 mg/m ² IV days 1 through 5 <i>Repeat every 28 days x 4 cycles</i>	Tepper et al. <i>J Clin Oncol.</i> 2002;20:1744-1750. Sauer et al. <i>N Engl Med.</i> 2004;351:1731-1740.
5-FU/LV	LV 500 mg/m ² IV over 2 hours days 1, 8, 15, 22, 29, 36 5-FU 500 mg/m ² IV bolus 1 hour after start of LV days 1, 8, 15, 22, 29, 39 Followed by 2 weeks rest <i>Repeat x 3 cycles</i>	Petrelli et al. <i>J Clin Oncol.</i> 1987;5:1599-1565. Petrelli et al. <i>J Clin Oncol.</i> 1989;7:1419-1426.
Postoperative for patients not receiving preoperative chemotherapy/RT		
5FU/LV 5-FU + LV x 1 cycle then concurrent chemotherapy/XRT (regimens below), then 5-FU/LV x 2 cycles		
	LV 500 mg/m ² IV over 2 hours days 1, 8, 15, 22, 29, 36 5-FU 500 mg/m ² IV bolus 1 hour after start of LV days 1, 8, 15, 22, 29, 39 Followed by 2 weeks rest	Petrelli et al. <i>J Clin Oncol.</i> 1987;5:1559-1565. Petrelli et al. <i>J Clin Oncol.</i> 1989;7:1419-1426.
5FU/LV 5-FU + LV x 2 cycles then concurrent chemotherapy/XRT (regimens below), then 5-FU/LV x 2 cycles		
	Before RT 5-FU 425 mg/m ² /d IV days 1 through 5 and 29 through 33 LV 20 mg/m ² /d IV days 1 through 5 and 29 through 33 After RT 5-FU 380 mg/m ² /d for 5 consecutive days LV 20 mg/m ² /d for 5 consecutive days <i>Repeat 2 cycles</i>	Tepper et al. <i>J Clin Oncol.</i> 2002;20:1744-1750.
FOLFOX4	Oxaliplatin 85 mg/m ² IV over 2 hours, day 1 LV 200 mg/m ² IV over 2 hours, days 1 and 2 5-FU 400 mg/m ² IV bolus, then 600 mg/m ² IV over 22 hours, days 1 and 2 <i>Repeat every 2 weeks</i>	Goldberg et al. <i>J Clin Oncol.</i> 2004;22:23-30.
mFOLFOX6*	Oxaliplatin 85 mg/m ² IV over 2 hours, day 1 LV 400 mg/m ² IV over 2 hours, day 1 5-FU 400 [†] mg/m ² IV bolus, then 1,200 mg/m ² IV days 1,2 or 2400 mg/m ² over 46 hours <i>Repeat every 2 weeks</i>	Cheeseman et al. <i>Br J Cancer.</i> 2002;87:393-399. Welles et al. <i>J Clin Oncol.</i> 2004;22(suppl). Abstract 3537.
Capecitabine	1,250 mg/m ² PO in 2 divided doses, days 1 through 14 <i>Repeat every 3 weeks x 24 weeks</i>	Twelves et al. <i>N Engl J Med.</i> 2005;352:2696-2704.

5-FU = 5-fluorouracil; LV = leucovorin.

*NCCN recommends limiting chemotherapy orders to 24-hour units (ie, 1,200 mg/m²/d **not** 2,400 mg/m²/d over 46 hours) to minimize medication errors.

[†]LV dose is 200 mg/m² of levo-LV in Europe and 400 mg/m² of the racemic form in the United States. Levo-LV is available in the United States for pediatric osteosarcoma.

04/06/09

Colorectal Cancer: Pathway to Survival

List of Chemotherapeutic Regimens

Name	Regimen	Reference
Chemotherapy for advanced or metastatic colon or rectal disease		
Capecitabine	2,000-2,500 mg/m ² /d PO in 2 divided doses, days 1 through 14, followed by 7 days rest <i>Repeat every 3 weeks</i>	Van Cutsem et al. <i>J Clin Oncol.</i> 2001;19:4097-4106.
Cetuximab (<i>K-ras</i> wild-type gene only)	400 mg/m ² 1st infusion, then 250 mg/m ² IV weekly	
Irinotecan	125 mg/m ² IV over 30-90 minutes, days 1, 8, 15, 22 <i>Repeat every 6 weeks</i>	Cunningham et al. <i>The Lancet.</i> 1998;352:1413-1418.
	or 300-350 mg/m ² IV over 30-90 minutes, day 1 <i>Repeat every 3 weeks</i>	Fuchs et al. <i>J Clin Oncol.</i> 2003;21:807-814.
5-FU/LV Roswell Park regimen	LV 500 mg/m ² IV over 2 hours, days 1, 8, 15, 22, 29, 36 5-FU 600* mg/m ² IV bolus 1 hour after start of LV, days 1, 8, 15, 22, 29, 36 <i>Repeat every 8 weeks</i> *NCCN guidelines recommend a dose of 5-FU 500 mg/m ² IV bolus 1 hour after start of LV, days 1, 8, 15, 22, 29, 36	Petrelli et al. <i>J Clin Oncol.</i> 1989;7:1419-1426.
5-FU/LV de Gramont regimen (LV5FU2)	LV 200 mg/m ² IV over 2 hours, days 1 and 2 5-FU 400 mg/m ² IV bolus, then 600 mg/m ² IV over 22 hours, days 1 and 2 <i>Repeat every 2 weeks</i>	de Gramont et al. <i>J Clin Oncol.</i> 2000;18:2938-2947.
sLV5FU2	LV 400 mg/m ² IV over 2 hours, day 1 followed by 5-FU bolus 400 [†] mg/m ² , then 1,200 mg/m ² /d IV over 46-48 hours <i>Repeat every 2 weeks</i>	André et al. <i>Eur J Cancer.</i> 1999;35 :1343-1347.
Weekly 5-FU/LV	LV 20 mg/m ² IV over 2 hours 5-FU 500 mg/m ² 1 hour after LV infusion <i>Repeat every week or</i>	Jager et al. <i>J Clin Oncol.</i> 1996;14:2274-2279.
	5-FU 2,600 mg/m ² IV over 24 hours plus LV 500 mg/m ² <i>Repeat every week</i>	Douillard et al. <i>Lancet.</i> 2000;355:1041-1047.
FOLFIRI	Irinotecan 180 mg/m ² IV over 2 hours, day 1 LV 200 mg/m ² IV over 2 hours prior to 5-FU, days 1 and 2 5-FU 400 mg/m ² IV bolus followed by 5-FU 600 mg/m ² IV over 22 hours, days 1 and 2, or	Douillard et al. <i>Lancet.</i> 2000;355:1041-1047.
	Irinotecan 180 mg/m ² over 90 minutes, day 1 LV 400* mg/m ² IV over 2-hour infusion, day 1 5-FU 400 mg/m ² IV bolus, then 1,200 mg/m ² , days 1 and 2 (total 2,400 mg/m ² over 46-48 hours continuous infusion) <i>Repeat every 2 weeks</i>	André et al. <i>Eur J Cancer.</i> 1999;35:1343-1347.
FOLFOX4	Oxaliplatin 85 mg/m ² IV over 2 hours, day 1 LV 200 mg/m ² IV over 2 hours, days 1 and 2 5-FU 400 mg/m ² IV bolus, then 600 mg/m ² IV over 22 hours, days 1 and 2 <i>Repeat every 2 weeks</i>	Rothenberg et al. <i>J Clin Oncol.</i> 2003;21:2059-2069. André et al. <i>N Engl J Med.</i> 2004;350:2343-2351. de Gramont et al. 2005 ASCO GI Cancers Symposium. Abstract 167.
mFOLFOX6*	Oxaliplatin 85 mg/m ² IV over 2 hours, day 1 LV 400 mg/m ² IV over 2 hours, day 1 5-FU 400 [†] mg/m ² IV bolus, then 1,200 mg/m ² IV days 1 and 2 or 2,400 mg/m ² over 46 hours <i>Repeat every 2 weeks</i>	Cheeseman et al. <i>Br J Cancer.</i> 2002;87:393-399.
Cetuximab (<i>K-ras</i> wild-type gene only) ± irinotecan	Cetuximab 400 mg/m ² IV over 2 hours week 1 followed by 250 mg/m ² IV over 1 hour weekly Irinotecan 125 mg/m ² IV weekly for 4 consecutive weeks, followed by 2 weeks rest, or 180 mg/m ² every 2 weeks,	Cunningham et al. <i>N Engl J Med.</i> 2004;351:337-345.
	or 350 mg/m ² IV every 3 weeks or Cetuximab 500 mg/m ² every 2 weeks Irinotecan 300-350 mg/m ² every 3 weeks or 180 mg/m ² every 2 weeks or 125 mg/m ² every week for 4 weeks <i>Repeat every 6 weeks</i>	Van Cutsem et al. GI Cancers Symposium. 2005 ASCO. Abstract 169a.
CapeOX	Oxaliplatin 130 mg/m ² IV, day 1 Capecitabine 850 mg/m ² po bid, days 1 through 14 <i>Repeat every 22 days</i>	Hochster et al. <i>J Clin Oncol.</i> 2005;23(suppl 16). Abstract 3515. Hochster et al. 2006 ASCO GI Cancers Symposium. Abstract 244.
Bevacizumab/5-FU	Bevacizumab 5 mg/kg IV every 2 weeks + 5-FU/LV or FOLFOX or FOLFIRI	Kabbinavar et al. <i>J Clin Oncol.</i> 2005;23:3706-3712. Hurwitz et al. <i>J Clin Oncol.</i> 2005;23:3502-3508. Reidy et al. <i>J Clin Oncol.</i> 2007;25:2691-2695. Giantonio et al. 2005 ASCO GI Symposium. Abstract 169a.
Panitumumab (<i>K-ras</i> wild-type gene only)	Panitumumab 6 mg/kg IV over 60 minutes every 2 weeks	Giusti et al. <i>Oncologist.</i> 2007;12:577-583. VanCutsem et al. <i>J Clin Oncol.</i> 2007;25:1658-1664.

*NCCN recommends limiting chemotherapy orders to 24-hour units (ie, 1,200 mg/m²/d **not** 2,400 mg/m²/d over 46 hours) to minimize medication errors.

[†]LV dose is 200 mg/m² of levo-LV in Europe and 400 mg/m² of the racemic form in the United States. Levo-LV is available in the United States for pediatric osteosarcoma.