

RENAL CELL CANCER

BEVACIZUMAB

| | | | |
|-------------|----------|-----|---------------|
| Bevacizumab | 15 mg/kg | IV* | Day 1, Week 1 |
|-------------|----------|-----|---------------|

Followed 1 week later by

| | | | |
|-------------|----------|------|--|
| Bevacizumab | 10 mg/kg | IV** | Every 2 weeks starting Week 2 ¹ |
|-------------|----------|------|--|

¹Repeat cycle every 2 weeks.

*Administer over 2 hours; **Infusion time progressively shortened as tolerated to a minimum infusion time of 30 minutes.

Reference: [Yang JC, et al. N Engl J Med 2003;349:427 – 34.](#)

BEVACIZUMAB – ERLOTINIB

| | | | |
|-------------|------------|----|----------------------|
| Bevacizumab | 10 mg/kg | IV | Day 1, every 2 weeks |
| Erlotinib | 150 mg/day | PO | Daily starting Day 1 |

Continue until tumor progression or intolerance.

Reference: [Hainsworth JD, et al. J Clin Oncol 2005;23:7889 – 96.](#)

GEMCITABINE – 5-FLUOROURACIL

| | | | |
|----------------|----------------------------|------|------------------|
| Gemcitabine | 600 mg/m ² | IV* | Days 1, 8 and 15 |
| 5-Fluorouracil | 150 mg/m ² /day | CIVI | Days 1 – 21 |

*Administer over 30 minutes.

Repeat cycle every 28 days.

Reference: [Rini BI, et al. J Clin Oncol 2000;18:2419 – 26.](#)

INTERLEUKIN-2 (ALDESLEUKIN) HIGH DOSE*

| | | |
|---------------------------------|-----------------------|---|
| Aldesleukin (IL-2) [‡] | 600,000–720,000 IU/kg | IV bolus over 15 minutes every 8 hours for 14 consecutive doses as tolerated. Repeat after a 5 – 9 day rest period. |
|---------------------------------|-----------------------|---|

[‡]Routine premedication administered; *Administered in an ICU setting with maximum support including pressors.

May repeat cycle in 6 – 12 weeks in responding patients for 1 – 2 more cycles (maximum of 28 doses per cycle).

Reference: [Fyfe G, et al. J Clin Oncol 1995;13:688 – 96.](#)

INTERLEUKIN-2 (ALDESLEUKIN) LOW DOSE

Aldesleukin (IL-2)[‡] 18 x 10⁶ units/m²/day CIVI* Days 1 – 5

[‡]Routine premedication administered; *Protocol stipulates central venous access, hemodynamic monitoring, and prophylactic antibiotics.

NOTE: Treatment consists of 2 induction cycles and 4 maintenance cycles, with a 3-week rest period between cycles. Each induction cycle consists of two five-day courses of IL-2 infusion separated by a 6-day break. Each maintenance cycle consists of a 5-day infusion followed by 3 weeks of no therapy.

Reference: [Negrier S, et al. N Engl J Med 1998;338:1272 – 8.](#)

INTERLEUKIN-2 (ALDESLEUKIN) LOW DOSE (SUBCUTANEOUSLY)

INDUCTION PHASE

WEEK 1 AND 6

Aldesleukin (IL-2)[‡] 9 x 10⁶ units BID SQ Days 1 – 5

WEEKS 2, 3, 4, 7, 8 AND 9

Aldesleukin (IL-2)[‡] 9 x 10⁶ units BID SQ Days 1 and 2

Followed by

Aldesleukin (IL-2)[‡] 9 x 10⁶ units QD SQ Days 3 – 5

WEEK 5

Rest period

Maintenance phase begins after 2-week rest period.

MAINTENANCE PHASE

WEEK 1

Aldesleukin (IL-2)[‡] 9 x 10⁶ units BID SQ Days 1 – 5

WEEKS 2 – 4

Aldesleukin (IL-2)[‡] 9 x 10⁶ units BID SQ Days 1 and 2

Followed by

Aldesleukin (IL-2)[‡] 9 x 10⁶ units QD SQ Days 3 – 5

Maintenance cycles are repeated every 7 weeks for a maximum of 7 cycles.

[‡]Routine premedication administered.

Reference: [Tourani JM, et al. Ann Oncol 1996;7:525 – 8.](#)

INTERFERON ALFA

| | | | |
|-----------------------------|---------------------------|----|--------|
| Interferon _{α2a} † | 3 x 10 ⁶ units | SQ | Daily* |
|-----------------------------|---------------------------|----|--------|

*Dose escalated by 3 x 10⁶ unit increments every 7 days, as tolerated to a maximum dose of 9 x 10⁶ units subcutaneously daily.

†Premedication should be considered.

Reference: [Motzer RJ, et al. *J Clin Oncol* 2000;18:2972 – 80.](#)

INTERLEUKIN-2 (ALDESLEUKIN) – INTERFERON ALFA

| | | | |
|-----------------------------|--|------|------------|
| Interleukin (IL-2)† | 18 x 10 ⁶ units/m ² /day | CIVI | Days 1 – 5 |
| Interferon _{α2a} † | 6 x 10 ⁶ units/day | SQ* | TIW |

†Routine premedication administered; *Administered during each of the two induction cycles and during each interleukin-2 maintenance cycle.

NOTE: Treatment consists of 2 induction cycles and 4 maintenance cycles, with a 3-week rest period between cycles. Each induction cycle consists of two five-day courses of aldesleukin (IL-2) infusion separated by a 6-day break. Each maintenance cycle consists of a 5-day infusion followed by 3 weeks of no therapy. Protocol stipulates central venous access, hemodynamic monitoring and prophylactic antibiotics.

Reference: [Negrier S, et al. *N Engl J Med* 1998;338:1272 – 8.](#)

SORAFENIB

| | | | |
|-----------|------------|----|--------------|
| Sorafenib | 400 mg BID | PO | Continuously |
|-----------|------------|----|--------------|

NOTE: Administer the dose 1 hour prior to or 2 hours following a meal. Sorafenib available as 200 mg tablets.

References: [Escudier B, et al. *N Engl J Med* 2007;356:125 – 34;](#) [Burkowski RM, et al. *J Clin Oncol* 2007;25\(18S\). Abstract 5023.](#)

SUNITINIB

| | | | |
|-----------|-----------|----|-------------|
| Sunitinib | 50 mg/day | PO | Days 1 – 28 |
|-----------|-----------|----|-------------|

Repeat cycle every 42 days until disease progression, unacceptable toxicity or withdrawal of consent.

DOSE MODIFICATION: dose reduction for toxicity to 37.5 mg PO QD then to 25 mg PO QD.

NOTE: Administer the dose in the morning with water and without regard to meals. Sunitinib is available as 12.5 mg, 25 mg, and 50 mg capsules.

References: [Motzer RJ, et al. *JAMA* 2006; 295:2516 – 24;](#) [Motzer RJ, et al. *N Engl J Med* 2007;356:115 – 24;](#) [Motzer RJ, et al. *J Clin Oncol* 2007; 25\(18S\). Abstract 5024.](#)

TEMSIROLIMUS

Temsirolimus[‡]

25 mg

IV*

Weekly

[‡]Routine premedication administered; *Administer over 30 minutes.

Treatment continued until disease progression or unacceptable toxicity.

MONITORING PARAMETERS: blood glucose, CBC, serum cholesterol, CMP, serum triglycerides.

Reference: [Hudes G, et al. *N Engl J Med* 2007;356:2271 – 81.](#)

NOTES: