

## MELANOMA CHEMOTHERAPY REGIMENS (Part 1 of 2)

The selection, dosing, and administration of anti-cancer agents and the management of associated toxicities are complex. Drug dose modifications and schedule and initiation of supportive care interventions are often necessary because of expected toxicities and because of individual patient variability, prior treatment, and comorbidities. Thus, the optimal delivery of anti-cancer agents requires a healthcare delivery team experienced in the use of such agents and the management of associated toxicities in patients with cancer. The chemotherapy regimens below may include both FDA-approved and unapproved uses/regimens and are provided as references only to the latest treatment strategies. Clinicians must choose and verify treatment options based on the individual patient.

**General treatment notes:** Due to poor prognosis associated with this disease, entry into a clinical trial is the preferred first line of treatment.<sup>1</sup>

### REGIMEN

### DOSING

## Systemic Therapy for Advanced or Metastatic Melanoma

### First-Line Monotherapy

<b>Ipilimumab</b> (Yervoy) <sup>2-4</sup>	<b>Day 1:</b> Ipilimumab 3mg/kg IV once. Repeat cycle every 3 weeks for 4 cycles.
	<b>OR</b>
	<b>Day 1:</b> Ipilimumab 10mg/kg IV once. Repeat cycle every 3 weeks for 4 cycles, followed by maintenance therapy every 3 months.
<b>Dacarbazine</b> (DTIC) <sup>5</sup>	<b>Day 1:</b> Dacarbazine 2-4.5mg/kg/day IV for 10 days. Repeat cycle every 4 weeks.
	<b>OR</b>
	<b>Days 1-5:</b> Dacarbazine 250mg/m <sup>2</sup> /day IV. Repeat cycle every 3 weeks.
<b>Temozolomide</b> (Temodar; TMZ) <sup>6</sup>	<b>Days 1-5:</b> Temozolomide 200mg/m <sup>2</sup> /day orally for 5 days. Repeat cycle every 4 weeks. *Typically reserved for melanoma patients who have brain metastases.
<b>High-dose interleukin-2</b> (aldesleukin; Proleukin; IL-2;) <sup>1,7,8</sup>	<b>Monotherapy</b> <b>Days 1-5:</b> IL-2 22mcg/kg (360,000 IU/kg), 33mcg/kg (540,000 IU/kg), 36mcg/kg (600,000 IU/kg), or 44mcg/kg (720,000 mcg/kg) IV every 8 hours for up to 14 consecutive doses as clinically tolerated. (In the clinical trial setting, a second identical treatment cycle was scheduled after 6 to 9 days of rest, and courses could be repeated every 6 to 12 weeks in stable or responding patients for up to five courses [two cycles/ course]).  *High dose IL-2 should not be used in patients with inadequate organ reserve, poor performance status, or untreated or active brain metastases. For patients with small brain metastases and without significant peritumoral edema, IL-2 therapy can be considered.
<b>Ipilimumab</b> (Yervoy) + <b>dacarbazine</b> <sup>9</sup>	<b>Weeks 1, 4, 7 and 10:</b> Ipilimumab 10mg/kg IV + dacarbazine 850mg/m <sup>2</sup> , <b>plus</b> <b>Weeks 13, 16, 19 and 22:</b> dacarbazine 850mg/m <sup>2</sup> .  Patients with stable disease or an objective response and no dose-limiting toxic effects can receive ipilimumab every 12 weeks thereafter as maintenance therapy.

### Second-Line Monotherapy

<b>Dacarbazine + cisplatin</b> (Platinol; CDDP) + <b>vinblastine</b> (Velban; VLB) <sup>10,11</sup>	<b>Days 1 and 22:</b> Dacarbazine 800mg/m <sup>2</sup> IV, <b>plus</b> <b>Days 1-4 and 22-25:</b> Cisplatin 20mg/m <sup>2</sup> IV + vinblastine 2mg/m <sup>2</sup> IV. Repeat cycle every 3 weeks for 2 cycles.
	<b>OR</b>
	<b>Day 1:</b> Dacarbazine 800mg/m <sup>2</sup> IV, <b>plus</b> <b>Days 1-4:</b> Cisplatin 20mg/m <sup>2</sup> IV + vinblastine 1.2mg/m <sup>2</sup> IV. Repeat cycle every 3 weeks for max 4 cycles.
<b>Dacarbazine + paclitaxel</b> (Taxol) + <b>cisplatin</b> <sup>12</sup>	<b>Day 1:</b> Dacarbazine 800mg/m <sup>2</sup> IV, <b>plus</b> <b>Days 1-4:</b> Cisplatin 20mg/m <sup>2</sup> IV, <b>plus</b> <b>Days 1 and 8:</b> Paclitaxel 100mg/m <sup>2</sup> IV.
<b>Low-dose IL-2 + granulocyte macrophage-stimulating factor</b> (sargramostim; GM-CSF; Leukine) <sup>13</sup>	<b>Days 1-5:</b> IL-2 1 million IU/m <sup>2</sup> /day SC, <b>plus</b> <b>Days 1-14:</b> GM-CSF 125mcg/m <sup>2</sup> /day SC. Repeat cycle every 4 weeks for 12 cycles.
<b>Paclitaxel + carboplatin</b> (Paraplatin) <sup>14</sup>	<b>Days 1, 8, and 15:</b> Paclitaxel 100mg/m <sup>2</sup> IV + carboplatin AUC=2mg/mL/min IV. Repeat cycle every 4 weeks until disease progression.
<b>Paclitaxel + carboplatin ± sorafenib</b> (Nexavar) <sup>15,16</sup>	<b>Day 1:</b> Carboplatin AUC=6mg/mL/min IV + paclitaxel 225mg/m <sup>2</sup> IV, <b>followed by</b> <b>Days 2-19:</b> Sorafenib 400mg orally twice daily. Repeat cycle every 3 weeks.

*continued*

## MELANOMA CHEMOTHERAPY REGIMENS (Part 2 of 2)

### References

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