

Induction Chemotherapy for Acute Lymphocytic Leukemia: E2993 protocol

Contact Physician: _____ **Pager:** _____

Diagnosis: _____

Cycle: Induction, phase I, weeks 1-4 Day 1= _____ **Consent form done**

Weight: _____ **Height:** _____ **BSA:** _____

Adjusted IBW: _____ **Adjusted BSA:** _____

Allergies: _____

<p>Daunorubicin 60mg/m² IV days 1,8,15,22 Vincristine 1.4 mg/m² (maximum 2mg) slow IV push days 1,8,15,22 L-Asparaginase 10,000 units IV or IM days 17-28 Prednisone 60 mg/m² PO daily in two divided doses, days 1-28, then taper. Methotrexate 12.5 mg IT day 15 Hydrocortisone 30 mg IT may be given with IT chemotherapy If CSF is positive for leukemia, patient to receive weekly or twice weekly IT chemotherapy until CSF negative for two consecutive LPs, then per protocol.</p>

- 1. Hydration:** Sodium chloride 0.9% IV at 150 mL per hour continuously
- 2. Prophylactic Medications:** (check the appropriate medications)
 - Allopurinol: 300mg PO daily for 10 days. (Must be discontinued before Phase 2).
 - Acyclovir: 400mg PO twice daily
 - TMP/Sulfa: 160/800mg 1 tablet PO twice daily every Sat/Sun
 - Antifungal:
 - GI prophylaxis:
 - Senokot S: 2 tablets PO daily
 - Acetaminophen 650 mg PO prior to each dose of Asparaginase
 - Diphenhydramine 50 mg PO prior to each dose of Asparaginase

3. **Anti-emetics:** (check the appropriate medications)

- Ondansetron: 24mg PO prior to IV chemotherapy on days 1,8,15, and 22. May give IV if unable to tolerate PO.
- Lorazepam: 0.5mg - 1 mg PO or IV every 4 hours prn nausea
- Prochlorperazine 10mg PO every 6 hours as needed nausea

4. **Chemotherapy:**

- **Daunorubicin** (60mg/m²) _____ mg IV push weekly X 4 doses.

Day 1 _____

Day 8 _____

Day 15 _____

Day 22 _____

- **Vincristine** (1.4 mg/m²) _____mg (maximum 2mg) slow IV push weekly X 4 doses.

Day 1 _____

Day 8 _____

Day 15 _____

Day 22 _____

- Asparaginase test dose prior to first dose of Asparaginase: 2 units/0.1ml intradermal. Observe the skin test for one hour for a wheal or erythema.
- No premedications prior to test dose
- If Asparaginase is held greater than one week, repeat test dose.
- **L-Asparaginase** 10,000 units IV or IM daily, Days 17-28. (Select IV or IM)
 - L-Asparaginase 10,000 units in 100mL Dextrose 5% in Water IV over 30 minutes
 - L-Asparaginase 10,000 units IMDay 17=_____ through Day 28=_____. Total 12 doses.
- **Prednisone** (60mg/m²/day) _____ mg PO daily in two divided doses of _____mg in the morning and _____mg in the evening, Days 1-28. Day 1 = _____ through Day 28= _____. First dose prior to IV chemotherapy.

Taper prednisone dose over 10 days starting day 29 _____,
 30mg/m²/day _____mg PO daily X 2 days:
 15mg/m²/day _____mg PO daily X 3 days:
 7.5mg/m²/day _____mg PO daily X 3 days:
 3.75mg/m²/day _____mg PO daily X 2 days:
 then discontinue.

- **Intrathecal methotrexate** 12.5 mg IT on day 15.
 (complete triplicate IT chemotherapy form)
 Day 15 _____
- **Hydrocortisone** 30 mg IT on days 15.
 (complete triplicate IT chemotherapy form)
 Day 15 _____

Signed: _____ Pager: _____

Blood 106(12): 3760-3767.

Addendum: Recommended dose adjustments:

Philadelphia chromosome positive patients: consider imatinib 400-600mg PO daily (of note, data on toxicity in phase I is unclear).

Asparaginase hold for the following: pancreatitis, grade 3 or 4 liver toxicity deep venous thrombosis or pulmonary embolism, major hemorrhage.

- Patients with hypersensitivity should receive PEG-Asparaginase (if unable to tolerate L-Asparaginase). PEG-Asparaginase 2,500 international units/m².

Hepatic toxicity: Adjust vincristine and daunorubicin accordingly

<u>Direct Bilirubin</u>	<u>Vincristine</u>	<u>Daunorubicin</u>
2-3	100% calculated	50% calculated
>3	50% calculated	25% calculated

Neurotoxicity: Vincristine dose should be modified to 50% for parasthesia proximal to the DIP joints and stopped entirely for major muscle weakness, cranial nerve palsy, or severe ileus.

