<table>
<thead>
<tr>
<th>GENERIC NAME (BRAND NAME(S))</th>
<th>RATE OF PUSH</th>
<th>VESICANT STATUS *</th>
<th>SPECIAL ISSUES TO CONSIDER</th>
<th>ADVERSE EFFECTS/COMMENTS</th>
<th>MONITORING PARAMETERS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bleomycin</strong> <em>(Blenoxane)</em></td>
<td>Slow IV Push – one unit per minute. <em>(after test dose given successfully)</em></td>
<td>NON Viscant</td>
<td>- Test dose 1 unit slow IVP for first two doses - wait 1 hour. Proceed if no untoward patient reaction. - Note – dose is in UNITS.</td>
<td>- Anaphylaxis kit to ante-room - Avoid O2 use with patients receiving bleomycin. - Patients with pulmonary fibrosis may arrest during infusion. Pulmonary risks greater with age and previous chest radiation treatments. Dose adjustment needed if renal compromise.</td>
<td>- Lifetime maximum dose 400 units</td>
</tr>
<tr>
<td><strong>Cytarabine</strong> <em>(Ara-C)</em></td>
<td>Slow</td>
<td>NON Viscant</td>
<td>Rapid infusion causes bowel necrosis, dizziness, nausea, projectile vomiting.</td>
<td>- Monitor for: neurotoxicity, mucositis, diarrhea, conjunctivitis (consider steroid eye drops preventively) - Serious noncardiogenic pulmonary edema can occur with high doses. - Do not confuse with the liposomal formulation</td>
<td></td>
</tr>
<tr>
<td><strong>Dactinomycin</strong> <em>(Actinomycin D, Cosmegen)</em></td>
<td>Over 15 minutes</td>
<td>Viscant</td>
<td>- Dosage is in mcg - Solution is gold-reddish colored. - Radiation recall effect possible</td>
<td>- High emetogenic potential - Avoid sun exposure</td>
<td></td>
</tr>
<tr>
<td><strong>Daunorubicin</strong> <em>(Cerubidine)</em></td>
<td>Slow – Over 15-20 minutes</td>
<td>Viscant</td>
<td>Causes red urine</td>
<td>- Need allopurinol to prevent tumor lysis syndrome - Never give sq. or IM - High emetogenic potential - Do not confuse with the liposomal formulation - Cumulative doses of 550mg/m2 may cause congestive heart failure</td>
<td></td>
</tr>
<tr>
<td><strong>Doxorubicin</strong> NON lyposomal <em>(Adriamycin)</em></td>
<td>Slow – over 15-20 minutes</td>
<td>Viscant</td>
<td>- Radiation recall effect is possible. - Maximum cumulative lifetime dose to minimize cardiac side effects is 550mg/m2; if radiation involved lifetime max is 450 mg/m2. - Dose is modified for elevated bilirubin levels. - Deep line route highly preferred. Extravasation will result in severe tissue necrosis.</td>
<td>- Caution in pts. with CHF. - Patients should have a baseline ejection fraction measured before administration. - Turns urine orange to red color - Tongue discoloration also possible.</td>
<td></td>
</tr>
</tbody>
</table>
## Markey Cancer Center Nurses’ Guide:

*Chemotherapy Intravenous Push (IVP) Drug List – Approved for Chemotherapy Certified RN Administration*

Univrsity of Kentucky Chandler Medical Center

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| Fluorouracil (5-FU)         | Over 5 minutes | Irritant        | - Always give AFTER methotrexate if both drugs being administered  
- Do not use cloudy solution.  
- Usually given along with leucovorin in colorectal cancer. | - Photosensitivity/ sun exposure risk.  
- Often turns vein dark  
- Emetogenic potential is high with doses > 1000 mg/m² | -              |
| Mechlorethamine (Nitrogen Mustard) | Slow. Dilute well with rapidly running IVF flush solution. | Vescant | - After infusion is complete, give brisk bolus approx. 200 cc IVF to flush veins  
- Solution is very unstable. Use within 15 minutes.  
- Extravasation antidote is sodium thiosulfate | - Unused solution must be chemically neutralized.  
- Can discolor vein brown  
- Spill requires neutralization for 45 min with 5% sodium thiosulfate + 5% sodium bicarbonate | -              |
| Methotrexate (Folex, Rheumatrex) | Over 5 minutes IVP doses <149mg | NON Vescant | Leucovorin rescue needed with high dose (over 100 mg/m²). Maintain urine pH > 7.0 with high dose | - Renal problems can be decreased by alkalinization of urine and intense hydration.  
- Pt. should avoid sun exposure. | -              |
| Vinblastine (Velban)        | Over 5 minutes | Vescant | Drug is FATAL if given intrathecally. | Monitor for possible life threatening acute bronchospasm. Neurotoxicity | -              |
| Vincristine (Oncovin)       | Over 5 minutes | Vescant | Drug is FATAL if given intrathecally. | - Neurotoxicity is dose- limiting side effect.  
- Constipation is common  
- Absolute maximum dose is 2mg. | -              |

*Use deepline or PICC for vescicants whenever possible.

- Note that IV Push rates of infusion are considerably longer for chemotherapy than for other drugs due to toxicity involved.
- Maximum size syringe for chemo IV Push is 30 cc. Chemo syringe is not to be filled to greater than 2/3 capacity to minimize risk of plunger, barrel separation.

- **If the medication is not approved for IV push administration and alternative routes of administration are not available, approval for this individual situation must be obtained through collaboration with pharmacy and the patient care manager.**

Updated: 3/20/03
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