stimulation of the eosinophil lineage; although these cytokines are interlinked, we found no association between the increase in splenic size and eosinophilia.

The splenomegaly could be part of the vascular leak syndrome, a well-recorded side effect of rIL-2. This syndrome is characterized by the movement of fluid from the vasculature via leaking cytokine-activated endothelial cells to the tissues, leading to ascites with pleural effusions and pulmonary edema. None of these patients, though, had such extreme side effects.

The impression from our unavoidably incomplete retrospective survey is that splenic enlargement occurs with IL-2 therapy and is possibly related to the total amount of IL-2 received. A prospective study is to be undertaken.

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We thank Prof. O. Eremin and Dr. A. A. Dawson, who cared for these patients, for their encouragement.

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Table 1. Summary of hematologic and radiologic findings

<table>
<thead>
<tr>
<th>Patient No.</th>
<th>Malignancy type</th>
<th>Complete data for this patient</th>
<th>No. of rIL-2 courses</th>
<th>Eosinophilia, ( \times 10^9/L )</th>
<th>Lymphocytosis, ( \times 10^9/L ) if &gt; 6</th>
<th>% of splenic increase*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Colorectal</td>
<td>No</td>
<td>0.5</td>
<td>None*</td>
<td>None</td>
<td>—</td>
</tr>
<tr>
<td>2</td>
<td>Renal</td>
<td>No</td>
<td>1.5</td>
<td>5.1</td>
<td>7.8</td>
<td>—</td>
</tr>
<tr>
<td>3</td>
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<td>No</td>
<td>2.0</td>
<td>1.9</td>
<td>6.4</td>
<td>—</td>
</tr>
<tr>
<td>4</td>
<td>Colorectal</td>
<td>No</td>
<td>2.0</td>
<td>8.9</td>
<td>8.0</td>
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</tr>
<tr>
<td>5</td>
<td>Colorectal</td>
<td>Yes</td>
<td>2.5</td>
<td>8.9</td>
<td>8.0</td>
<td>None</td>
</tr>
<tr>
<td>6</td>
<td>Colorectal</td>
<td>Yes</td>
<td>3.0</td>
<td>6.8</td>
<td>14.1</td>
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<td>3.0</td>
<td>2.7</td>
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</tr>
<tr>
<td>8</td>
<td>Renal</td>
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<td>3.0</td>
<td>14.5</td>
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<td>None</td>
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<td>6.1</td>
<td>9.9</td>
<td>65</td>
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<td>6.0</td>
<td>9.0</td>
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<tr>
<td>13</td>
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<td>6.0</td>
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<tr>
<td>14</td>
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<td>6.0</td>
<td>3.4</td>
<td>15.1</td>
<td>56</td>
</tr>
</tbody>
</table>

*— data incomplete to assess splenic size.

References

(1) HAMBLIN TJ: Interleukin 2 BMJ 300:275-276, 1990

Achievable Survival in Breast Cancer

In the item on tumor markers in the News section of the March 18, 1992, issue of the Journal, Dr. William McGuire is quoted as saying that "we just don't have the drugs to cure breast cancer." I beg to differ with Dr. McGuire. There are now 10- and 15-year disease-free survival statistics available that indicate virtual and apparent clinical cure in 25%-35% of stage III breast cancers, even inflammatory cancers, and in stage 2B with greater than four positive nodes as a result of combination chemotherapy, usually doxorubicin-containing regimens, involving three to five agents and now including tamoxifen. Unfortunately, this type of achievable survival is inadequately emphasized to oncologists and the American public even at this late date.

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Cutaneous Basal Cell Carcinomas in the Rat

The statement of Meyskens (1) that "the histology of the skin cancers induced by chemical or UV light in lower animals is largely fibrosarcoma rather than the basal or squamous cell carcinoma typically seen in humans" merits amplification. Basal cell carcinomas of the skin are readily induced in rats by the long-term topical application of carcinogens, such as 3-methylcholanthrene (MCA), anthraniine, and 7,12-dimethylbenz[a]anthracene (DMBA), or by ionizing radiation (2,3). Such tumors in the rat arise predominantly from the pilosebaceous structure, whereas in humans the epidermis appears to be the primary source.

The relative proportion of basal and squamous cell carcinomas and fibrosarcomas in the rat varies with the carcinogen used. MCA yields the highest proportion of basal cell carcinomas. However, in contrast to anthraniine and DMBA, fibrosarcomas are apparently not induced by MCA (2,3). Relevant to this discussion is the report of Lupulescu (4) in which systemic administration of retinol had a significant inhibitory effect on the development of cutaneous basal cell carcinomas in the rat and squamous cell carcinomas in the mouse that were induced by the topical application of MCA.

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