From the transfer of myeloma idio
type-specific immunity from an actively
immunized donor (2), this procedure
could now be developed toward the
transfer of immunity to immunogenic
gene product proteins of point-mutated
(HER-2 [also known as erbB2 or neu] → p185HER-2) or fused (abl-bcr →
p210ABL-BCR) oncogenes combined with
interleukin 2 or other lymphokines, thus
re-enforcing the therapeutic value of the
"graft-versus-leukemia (lymphoma; can-
cer)" reaction.

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Does Paclitaxel Penetrate Into
Brain Tumor Tissue?

Glantz et al. (1) reported very low
paclitaxel (Taxol) concentrations in the
cerebrospinal fluid (CSF) of patients
who received infusions of paclitaxel at
doses between 90 and 200 mg/m²; these
CSF concentrations were between 0.5% and
8.3% [Table 2 in (1)] of those in concomitantly
taken plasma samples. In
the same report, Glantz et al. (1)
reported that paclitaxel could not be
detected in rat brain and in rat C6
glioma tissue, although the plasma
concentrations of the drug ranged from 0.62
to 153 μM [Table 3 in (1)]. The authors
questioned whether the use of paclitaxel
in the treatment of central nervous sys
tem (CNS) malignancies—also in
combination with radiation therapy—
must thus be reconsidered in light of this
limited access to the CNS.

The limited transfer of paclitaxel into
CNS tissue may be caused by the high
protein-binding level and the high
molecular weight (MW; 853.9). Howev
er, the lipophilic properties of the
drug (logP octanol/water = 3.5), lead
ning to a large distribution volume of the
agent, make it likely that paclitaxel is
able to cross the blood-brain barrier.
Because of these theoretical considerations
and the possible role of paclitaxel in
the treatment of CNS tumors, we have
measured paclitaxel concentrations (by
high-performance liquid chromatogra
phy [HPLC] with a detection limit of
6 ng/mL in plasma and 25 ng/g in brain
tissue) in the brain tumor tissue of three
patients who were operated on for a
recurrent glioma (2). These patients
received a dose of 175 mg/m² in a 3-
hour infusion prior to surgery. We
measured paclitaxel concentrations in
plasma, CSF, cyst fluid, and brain and
tumor tissue. Samples were taken at the