

Albumin-Bound Paclitaxel In Metastatic Breast Cancer A Viewpoint by Neville Davidson

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Taxanes are among the most active chemotherapy agents in the treatment of metastatic breast cancer. The term taxane is used to describe a group of drugs used in the treatment of cancer, specifically paclitaxel (Taxol®)¹, docetaxel (Taxotere®) and now 130-nanometre albumin-bound paclitaxel (*nab*TM-paclitaxel) [ABRAXANE®]. Taxanes are unique as they affect cell structures known as microtubules.

The new formulation of paclitaxel is albumin-bound and is able to increase paclitaxel delivery to tumour cells. This was translated in the phase III trial to an objective response rate that was significantly greater in recipients of *nab*-paclitaxel than conventional polyoxyethylated castor oil (Cremophor® EL) solubilised paclitaxel (33% vs 19%).

Taxane-containing regimens were associated with a greater degree of leukopenia and neurotoxicity, but less nausea and vomiting than *nab*-paclitaxel. Grade 3 sensory neuropathy is significantly greater with *nab*-paclitaxel, but improved rapidly (median 22 days) from grade 3 to lower grades with treatment interruption.

The benefit of taxanes appears to be less apparent in patients who have not had previous anthracyclines. It is often thought that the use of taxane-containing regimens early in the course of treatment might improve the response rate and time to progression, but not overall survival in women with metastatic breast cancer. With improved responses obtained with *nab*-paclitaxel we may see a benefit in overall survival in the future.

In the US, *nab*-paclitaxel has been approved for the treatment of metastatic breast cancer after failure of combination chemotherapy or relapse within 6 months of adjuvant chemotherapy. European license is expected this year. ▲

1 The use of trade names is for product identification purposes only and does not imply endorsement.