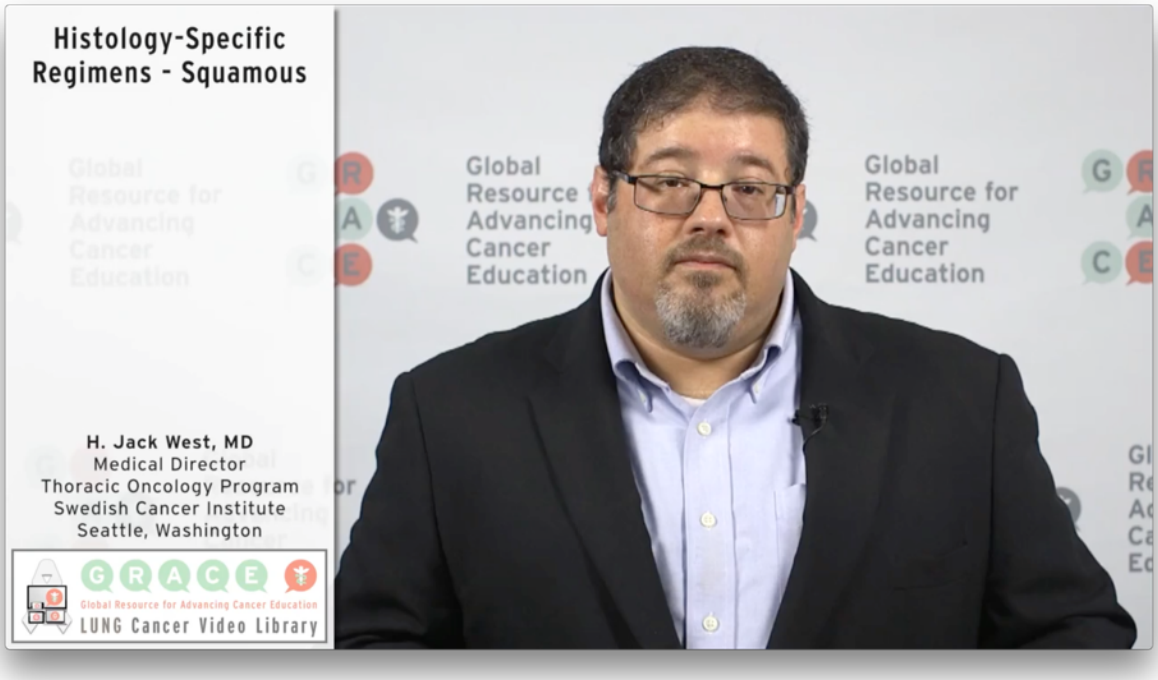
Global Resource for Advancing Cancer Education

LUNG Cancer Video Library

Histology-Specific Regimens - Squamous



TRANSCRIPT & FIGURES

There are a few common subtypes of non-small cell lung cancer. These are broken down by histology – the appearance of it under the microscope. The most common is called adenocarcinoma; the second most common is known as squamous histology and this accounts for somewhere in the range of 20% to 25% of the non-small cell lung cancers out there.

There are many standard chemotherapy regimens that are commonly used for patients with advanced non-small cell lung cancer, and overall they tend to produce very comparable results, making it very reasonable to choose one or another without a lot of difference, but there are certain regimens that might be more or less favored. For instance, in the setting of squamous lung cancer, there are a couple that we really choose to avoid in these patients because they are either unsafe or less effective.

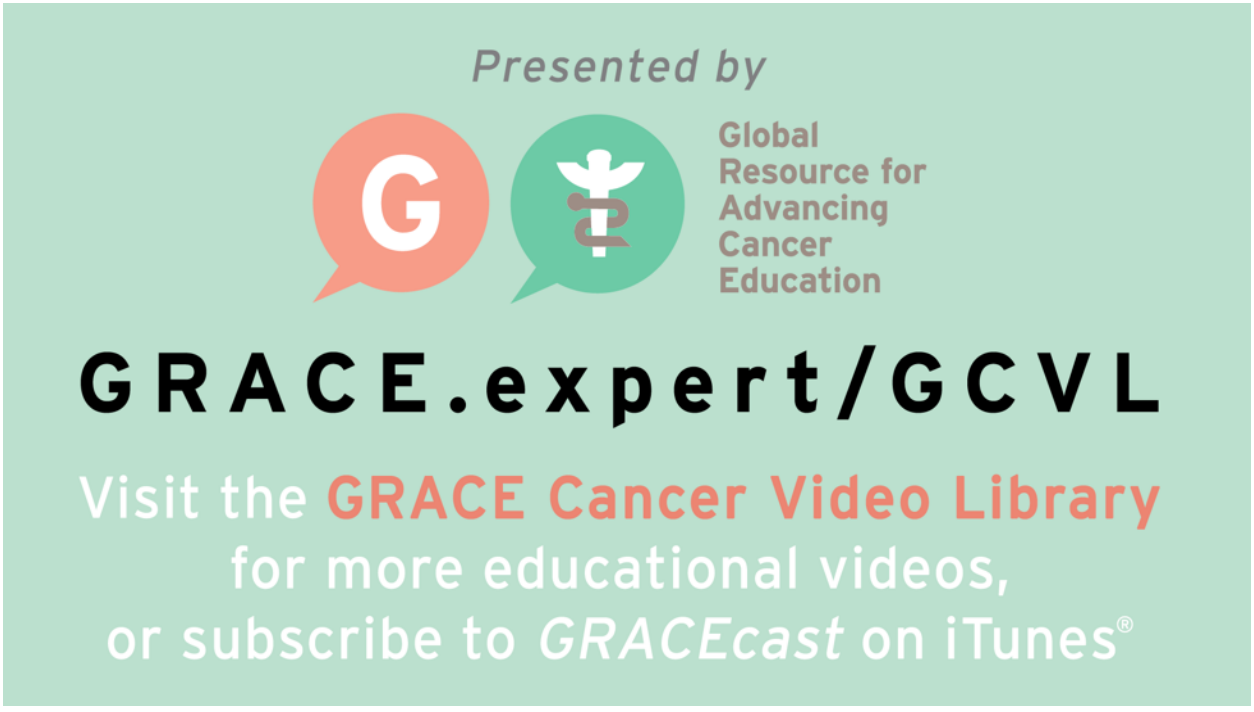
So in terms of safety, one of the agents that we really prefer to not give is called Avastin and it is not a standard chemotherapy, but sometimes added to chemotherapy as a third agent that blocks the tumor blood supply. This can be helpful in some patients with non-squamous histology, but it has led to an unacceptably high risk of bleeding complications in patients with squamous histology. Because of that we do not give it in that setting – it is not considered safe.

Another agent that is really not favored is known as Alimta or pemetrexed, and that is because it does not seem to have good efficacy – it doesn't do better than giving a placebo drug in that setting.

There are certainly other good choices. A cisplatin or carboplatin drug combined with an agent like Taxol, also known as paclitaxel, is a fine choice. There is also a related drug called Abraxane, which is also known as albumin-bound paclitaxel or NAB paclitaxel. This agent was added to carboplatin and compared to carboplatin and Taxol in a large group of patients with advanced lung cancer of a few different types, and the patients with squamous histology had a higher rate of tumor shrinkage if they received the carboplatin and Abraxane combination, than carboplatin and Taxol. It's not an overwhelming difference and there wasn't a clear difference in survival, but because of this some people might favor carboplatin and Abraxane.

Another choice that might be considered and favored in patients with squamous lung cancer is a platinum with Gemzar, also known as gemcitabine, and that's because there was a randomized trial that gave cisplatin and Gemzar, or cisplatin and Alimta to patients with different types of lung cancer, and that study showed that the patients who got cisplatin and Gemzar did better overall than the patients who got cisplatin and Alimta. That might have been in large part because Alimta is not very effective in squamous lung cancer, but in fact we do tend to favor giving Gemzar as a leading partner with a platinum drug, if not a taxane. The taxane drugs: Taxol, Abraxane, or Taxotere, all seem to have efficacy that is every bit as good in the patients who have a squamous or non-squamous lung cancer.

So there are certainly several options, but some may be particularly better for patients with squamous histology.



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