

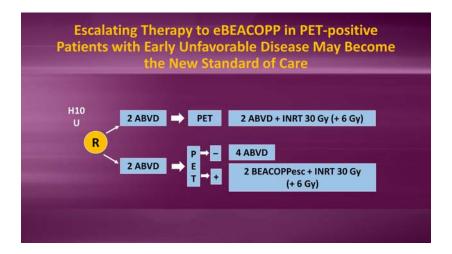
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Welcome to Managing Hodgkin Lymphoma. My name is Andreas Engert. I am Professor for Hematology and Oncology, and I am the Chairman of the German Hodgkin Study Group. I am speaking live from the 10th International Symposium on Hodgkin Lymphoma which is held in Cologne, Germany in Europe. This is a very, very interesting meeting because we are covering basically all topics of Hodgkin lymphoma and associated diseases. We were very happy to see this particular meeting which is our 10th anniversary meeting being attended by more than 1,300 people from more than 80 countries. It is a very good turnout, and many people are really actively engaged in this meeting. We have many workshops and satellite symposia and then main programs with all sorts of discussion forums. Today, there is a debate on advance stages, which discusses what is the best treatment in advanced stages. Overall, this meeting covers basically all aspects of this disease including basic science and treatment in early stages, advanced stages, and relapsed. In the relapsed setting, we have very, very interesting new data on the PD-1 inhibitors. Late side effects and new approaches in pediatric patients are also being discussed here. If you look at the first line, I think one of the highlights of this meeting was the new data on early unfavorable Hodgkin lymphoma. It shows that we might have a new standard of care in that setting.

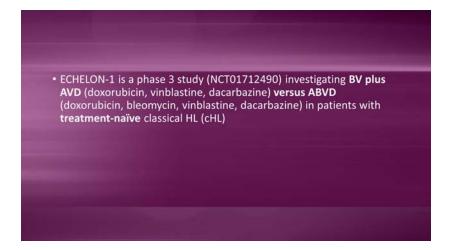
Which is a PET-adapted treatment, with all patients receiving 2 cycles of ABVD. They were randomized in this trial between additional ABVD or BEACOPP escalated, and a very significant difference favoring BEACOPP escalated with even a borderline advantage in terms of overall survival. That is something that I think will become the new standard of care for early unfavorable.





For early favorable, 2 cycles of ABVD followed by 20 Gy involved-field radiotherapy will remain standard. All attempts so far to improve on that by deleting more drugs have failed. There was some discussion on individualizing treatment and allowing maybe those patients with very good risks or those with big mediastinal involvement to be treated on an individual basis. That means if they were responding very well and had no risk factors, maybe some of these patients could be spared from additional radiotherapy.

In the advanced-stage setting, there is still the discussion between ABVD and BEACOPP escalated. However, this is now on a different level in that, there are a number of attempts to improve on the efficacy of ABVD. For instance by deleting bleomycin and replacing it with brentuximab vedotin. This is what was done in the ECHELON-1 study, a large randomized trial with 1,300 patients. The results are eagerly awaited, and we might see them next year.





On the other hand, BEACOPP escalated is more effective but also more toxic, and here, we try to detoxify this regimen by deleting more drugs from this backbone, and replacing them also with brentuximab vedotin. In the relapsed setting, unfortunately, I want to say the high-dose chemotherapy is still standard of care. This was defined 20 years ago. We were not able so far to improve on that, but through the advent of new drugs, we might, and there is strong interest in that. For instance, new data from a phase 1 and 2 study combining brentuximab with DHAP really showed that this is a very, very potent combination. This combination alone might be as good or even better as the standard of 2 cycles of chemotherapy plus high dose. We would see that in the next 3 years.

ECHELON-1 is a phase 3 study (NCT01712490) investigating BV plus AVD (doxorubicin, vinblastine, dacarbazine) versus ABVD (doxorubicin, bleomycin, vinblastine, dacarbazine) in patients with treatment-naïve classical HL (cHL)
Transplant BRaVE is a phase 1/2 study (NCT02280993) investigating BV plus DHAP (dexamethasone, AraC and cisplatin) in patients with cHL who are primary refractory to first-line chemo or in first relapse post-polychemotherapy regimen

If we talk about new aspects most importantly I think that were the RSD advent of the anti-PD1 monoclonal antibodies, in Hodgkin's there are two, nivolumab and pembrolizumab. Nivolumab has been registered this year in the U.S. and has just received the positive vote from CHMP, that is the AMA advisory group, and the pembrolizumab was also submitted for registration. We will probably see both these drugs being registered also in Europe next year. These drugs are really fascinating, although there was a long discussion on how they work, the complete mechanism of action is not fully understood yet. But these drugs are really very, very effective in Hodgkin patients that have undergone multiple treatments, high-dose chemotherapy, radiation, and several lines, 5 median lines for the nivolumab patients, for instance. No surprise that these drugs are really being discussed a lot, and now, not only the singleagent treatment is what we are seeing but certainly what we are doing and other groups are doing is combining these drugs either with other smart or targeted drugs such as brentuximab, or combining them with chemotherapy, a little chemotherapy and evaluate these combinations in first-line. There is really no stopping the development of these drugs, and doctors and patients are really keen to see a chemo and radiotherapy



drug-free treatment of these patients. This might become possible in the future with the use of brentuximab vedotin and these anti-PD1 antibodies.

Further down the line, it is very important to carefully document side effects, late side effects of treatment, and that is also a topic that is being discussed in depth at this meeting. Our group has just published two papers on a very important topic that is fatigue. You probably know that Hodgkin patients suffer and other cancer patients do suffer from fatigue. This can be a really big problem for those who continue to have fatigue even after years and years, even though they are cured from their malignancy. This is one of the major topics that is being addressed here at this meeting.

Many important points are being addressed here at this meeting. We are all thrilled by these new possibilities and these new treatment approaches that give us a chance to overcome chemo and radiotherapy. I am sure you will hear more about this in the near future. Thank you very much for viewing this activity. For additional resources, please be sure to view the other educational activities on *ManagingHodgkinLymphoma.com*. Thank you.