

TWiPO #23 ~ Neuroblastoma Jeopardy 2011

Join Dr Tim Cripe and his co-host Dr Lars Wagner in a fast-paced, in-depth, and comprehensive survey of 18 important recent papers on neuroblastoma research. Dr Cripe and Dr Wagner explore and discuss the compelling evidence reported on a variety of topics, including epidemiology, risk stratification, clinical trials, ALK mutation and expression, new targets, and genetics.

Please send all comments and questions to twipo@solvingkidscancer.org

Link to podcast:

<http://www.nbglobe.com/wp-content/uploads/2012/01/TWiPO-Episode-23.mp3>

This robust review of current research includes all of the following papers (time location p:

Clinical and biologic features predictive of survival after relapse of neuroblastoma: a report from the International Neuroblastoma Risk Group project.

J Clin Oncol. 2011 Aug 20;29(24):3286-92. Epub 2011 Jul 18.

<http://www.ncbi.nlm.nih.gov/pubmed/21768459>

Prognostic value of the stage 4S metastatic pattern and tumor biology in patients with metastatic neuroblastoma diagnosed between birth and 18 months of age.

J Clin Oncol. 2011 Nov 20;29(33):4358-64. Epub 2011 Oct 3.

<http://www.ncbi.nlm.nih.gov/pubmed/21969516>

A multilocus technique for risk evaluation of patients with neuroblastoma.

Clin Cancer Res. 2011 Feb 15;17(4):792-804.

<http://www.ncbi.nlm.nih.gov/pubmed/21325297>

Changes over three decades in outcome and the prognostic influence of age-at-diagnosis in young patients with neuroblastoma: a report from the International Neuroblastoma Risk Group Project.

Eur J Cancer. 2011 Mar;47(4):561-71. Epub 2010 Nov 26.

<http://www.ncbi.nlm.nih.gov/pubmed/21112770>

Pilot induction regimen incorporating pharmacokinetically guided topotecan for treatment of newly diagnosed high-risk neuroblastoma: a Children's Oncology Group study.

J Clin Oncol. 2011 Nov 20;29(33):4351-7. Epub 2011 Oct 17.

<http://www.ncbi.nlm.nih.gov/pubmed/22010014>

High-dose carboplatin-irinotecan-temozolomide: treatment option for neuroblastoma resistant to topotecan.

Pediatr Blood Cancer. 2011 Mar;56(3):403-8.

<http://www.ncbi.nlm.nih.gov/pubmed/21049517>

Treatment and outcomes of patients with relapsed, high-risk neuroblastoma: Results of German trials.

Pediatr Blood Cancer. 2010 Dec 9. [Epub ahead of print]

<http://www.ncbi.nlm.nih.gov/pubmed/21154634>

Reduced-intensity allogeneic stem cell transplantation for children with neuroblastoma who failed tandem autologous stem cell transplantation.

Pediatr Blood Cancer. 2011 Oct;57(4):660-5. doi: 10.1002/pbc.23035. Epub 2011 Jun 16.

<http://www.ncbi.nlm.nih.gov/pubmed/21681924>

22:50 Dr Wagner: "a subset may indeed benefit from intensive therapy... these results may be due to self-selection due to toleration of high-dose chemotherapy. We need to be able to predict who will benefit."

24:24

Anaplastic lymphoma kinase (ALK) inhibitor response in neuroblastoma is highly correlated with ALK

mutation status, ALK mRNA and protein levels.
Cell Oncol (Dordr). 2011 Oct;34(5):409-17. Epub 2011 May 31.
<http://www.ncbi.nlm.nih.gov/pubmed/21625996>

High ALK receptor tyrosine kinase expression supersedes ALK mutation as a determining factor of an unfavorable phenotype in primary neuroblastoma.
Clin Cancer Res. 2011 Aug 1;17(15):5082-92. Epub 2011 Jun 1.
<http://www.ncbi.nlm.nih.gov/pubmed/21632861>

Differential inhibitor sensitivity of anaplastic lymphoma kinase variants found in neuroblastoma.
Sci Transl Med. 2011 Nov 9;3(108):108ra114.
<http://www.ncbi.nlm.nih.gov/pubmed/22072639>

Selective therapeutic targeting of the anaplastic lymphoma kinase with liposomal siRNA induces apoptosis and inhibits angiogenesis in neuroblastoma.
Mol Ther. 2011 Dec;19(12):2201-12. doi: 10.1038/mt.2011.142. Epub 2011 Aug 9.
<http://www.ncbi.nlm.nih.gov/pubmed/21829174>

34:40

Polo-like kinase 1 is a therapeutic target in high-risk neuroblastoma.
Clin Cancer Res. 2011 Feb 15;17(4):731-41. Epub 2010 Dec 17.
<http://www.ncbi.nlm.nih.gov/pubmed/21169242>

NK cells engineered to express a GD(2) -specific antigen receptor display built-in ADCC-like activity against tumor cells of neuroectodermal origin.
J Cell Mol Med. 2011 May 20. doi: 10.1111/j.1582-4934.2011.01343.x. [Epub ahead of print]
<http://www.ncbi.nlm.nih.gov/pubmed/21595822>

Antitumor activity and long-term fate of chimeric antigen receptor-positive T cells in patients with neuroblastoma.
Blood. 2011 Dec 1;118(23):6050-6. Epub 2011 Oct 7.
<http://www.ncbi.nlm.nih.gov/pubmed/21984804>

Effect of MDM2 and vascular endothelial growth factor inhibition on tumor angiogenesis and metastasis in neuroblastoma.
Angiogenesis. 2011 Sep;14(3):255-66. Epub 2011 Apr 12.
<http://www.ncbi.nlm.nih.gov/pubmed/21484514>

Long term outcome of high-risk neuroblastoma patients after immunotherapy with antibody ch14.18 or oral metronomic chemotherapy.
BMC Cancer. 2011 Jan 18;11:21.
<http://www.ncbi.nlm.nih.gov/pubmed/21244693>

miRNA Expression Profiling Enables Risk Stratification in Archived and Fresh Neuroblastoma Tumor Samples.
Clin Cancer Res. 2011 Dec 15;17(24):7684-7692. Epub 2011 Oct 26.
<http://www.ncbi.nlm.nih.gov/pubmed/22031095>