

**Discussion of a Serious Adverse Event on  
OBA Protocol # 937 titled: *Vaccination With  
Lethally Irradiated Autologous Myeloblasts  
Admixed With GM-CSF-K562 Cells In Patients  
With Advanced Myelodysplastic Syndrome Or  
Acute Myeloblastic Leukemia After Allogeneic  
Hematopoietic Stem Cell Transplantation***



December 14, 2011



*Presenter :*

**Glen Dranoff, M.D.**

**Leader, Dana-Farber/Harvard  
Cancer Center Program in  
Cancer Immunology**

*Invited*

**Cynthia Dunbar, Ph.D.**

*Experts:*

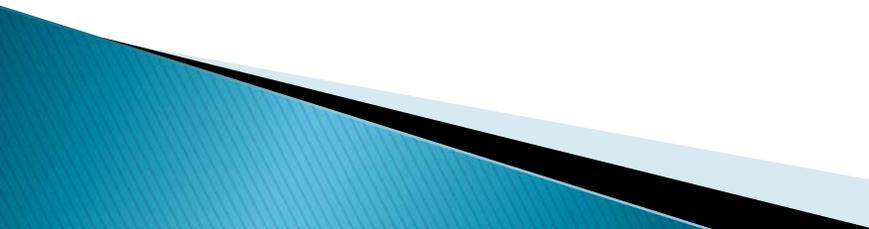
**Head, Molecular Hematopoiesis  
Section in the Hematology  
Branch, NHLBI**

**Amy Klion, Ph.D., Chief of the  
Eosinophil Pathology Unit in the  
Laboratory of Parasitic  
Diseases, NIAID**

# NIH/OBA Analysis

- ▶ **Using OBA's Genetic Modification Clinical Research Information System (GeMCRIS), 25 studies that employ a tumor vaccine using irradiated GM-CSF secreting K562 cells were identified:**
  - **At least 23 trials reported enrollment of subjects and 12 are complete**
  - **Approximately 400 subjects have been dosed**
- ▶ **48 studies that employ a tumor vaccine consisting of irradiated tumor cells transduced with GM-CSF were identified:**
  - **At least 38 trials reported enrollment of subjects and 31 are complete**
  - **Approximately 1400 subjects have been dosed**

# NIH/OBA Analysis

- ▶ **OBA screened GeMCRIS for serious adverse events submitted on these protocols in which the subject developed an unexpected leukocytosis with a predominance of eosinophils after receiving one or more vaccinations.**
  - ▶ **This analysis identified one event reported in a trial using autologous irradiated tumor cells that expressed GM-CSF for metastatic lung cancer.**
- 

# NIH/OBA Analysis

- ▶ In the previous event on a lung cancer trial, the leukocytosis was self-limiting and subject clinically did well.
  - ▶ Cytokine analysis indicated a rise in GM-CSF levels after the vaccination at the time the leukocytosis developed.
  - ▶ GM-CSF is a licensed product used to increase the white blood cell count in the setting of chemotherapy.
- 