



# **GTSAB REPORT**

## **Recombinant DNA Advisory Committee**

**December 5, 2013**



National Institutes  
of Health



# Protocols Submitted for Fourth Quarter 2013

- **29 Total submissions**

**Disease indications for the protocols not selected:**

**14 for cancer**

**4 for muscle disorders**

**2 for eye disorders**

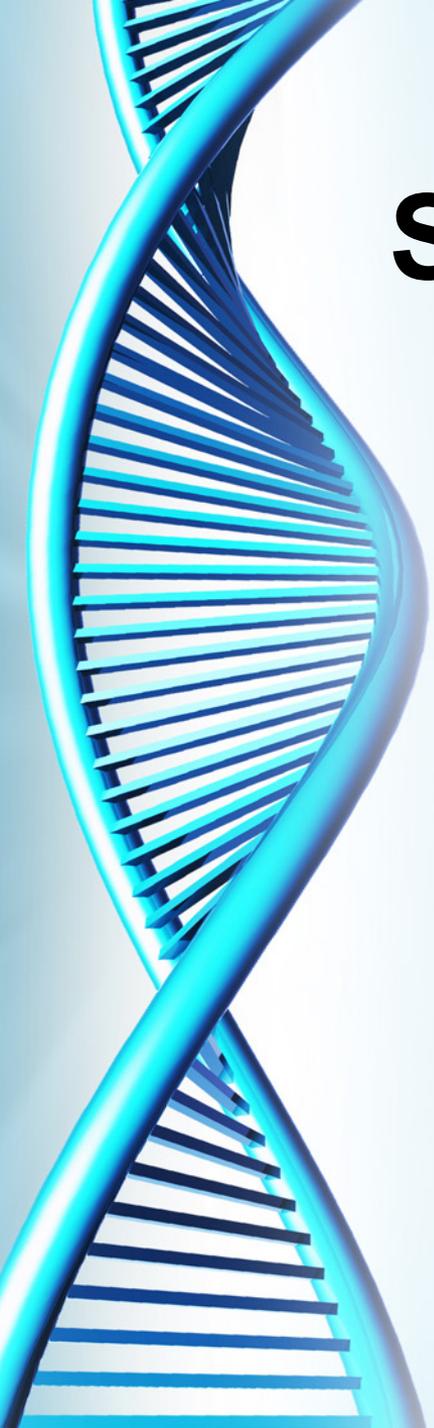
**1 for HIV**

**1 for wound healing**

**1 for sickle cell disease**

**1 for ALS**

<b>Vectors</b>	
<b>Retrovirus (1)</b>	<b>Plasmid (7)</b>
<b>Lentivirus (6)</b>	<b>Attenuated <i>Salmonella enterica</i> (1)</b>
<b>AAV (4)</b>	<b>RNA transfer (2)</b>
<b>Pox viruses (2)</b>	<b>Attenuated measles virus (1)</b>



# **Serious Adverse Events**

**46 serious adverse events were reviewed by the GTSAB from 19 protocols, including initial and follow-up reports. No events will be discussed today.**



# Opening of New Protocols Fourth Quarter 2013

- **Three protocols notified OBA of enrollment (MIC1 submission), all were publicly reviewed**



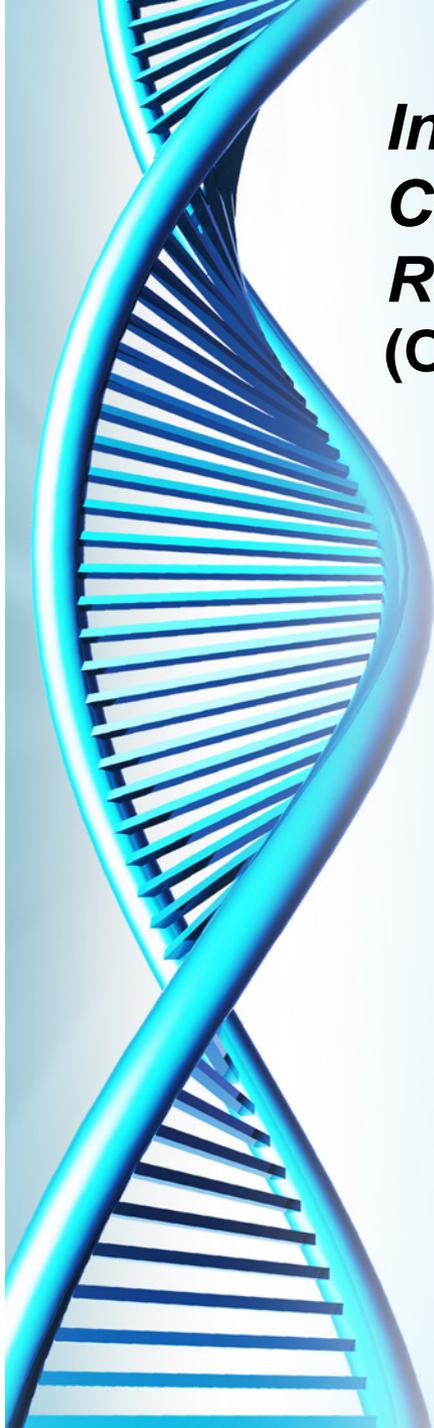
***Treatment of Subjects with Adenosine Deaminase (ADA) Deficient Severe Combined Immunodeficiency (SCID) with Autologous Bone Marrow CD34+ Stem/Progenitor Cells after Addition of a Normal Human ADA cDNA by the EFS-ADA Lentiviral Vector***  
**(OBA Protocol #1006 Reviewed December 2009)**

- A stopping rule has been added in the event of clonal expansion.
- Although detecting insertional mutagenesis could be complicated in individuals with dermatofibrosarcoma protuberans (DFSP), these children will not be excluded if they are not currently receiving treatment or if DFSP is not expected to be life-limiting within five years of gene transfer. While DFSP is rare in the general population, it is more common in those with ADA SCID. Indeed, 7 of 9 ADA-SCID patients evaluated at the NIH had documented atrophic or nodular DFSP, including some patients who received gene therapy on previous protocols. DFSP is a slowly growing tumor and metastasizes in about 1% of patients.



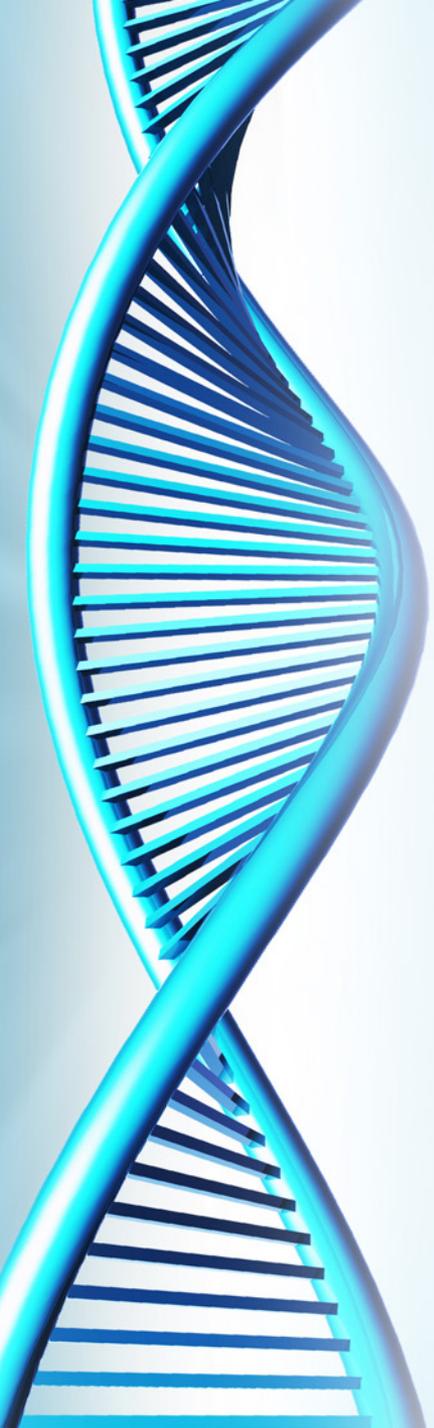
***A Phase I Randomized, Double-Blind, Placebo-Controlled Study of a Multi-Antigen DNA Vaccine Prime Delivered by In Vivo Electroporation, rVSV Booster Vaccine in HIV-Infected Patients Who Began Antiretroviral Therapy During Acute/Early Infection  
(OBA Protocol #1214 Reviewed June 2013)***

- **The informed consent was modified to expand on potential risks associated with a structured treatment interruption and to make it clear to potential research participants that there may be alternative trials available to them.**



***Infusion of Allogeneic, 3rd Party CD19-specific T Cell (CD19RCD137+ T Cells) in Patients with Refractory CD19<sup>+</sup> B-Lineage Malignancies (OBA Protocol #1236 Reviewed September 2013)***

- **If the T cell receptors on the allogeneic cells are not successfully inactivated, there is a risk of pulmonary graft vs. host disease (GVD) from the infused cells. In order to detect pulmonary GVD prior to the onset of clinical symptoms, pulmonary function tests will now be obtained three months after CAR T cell infusion.**
- **In a previous T cell CAR protocol, there was a case of an anaphylactic reaction with repeat dosing (Maus, M. *et al.*, 2013. *Cancer Immunol. Res.* ) Since the protocol includes the option for a second infusion, this potential risk has been added to the informed consent.**



**Questions?**