## 15. Systems that Function Normally in Children with Progeria

It is important to recognize that there are a number of body systems that function normally in children with Progeria. This may be because progerin is not produced by some types of cells, or because certain organs are more resilient to the effects of progerin, or it may be due to other unrecognized reasons. Immunizations are recommended, including annual flu vaccines.

- > Children with Progeria generally have normal function in the following:
- •Brain, except for the blood vessels in the brain, which become diseased and can cause strokes
- •Liver
- Kidney
- •The gastrointestinal system
- Immune function is normal; the healing of cuts and broken bones occurs at the usual rate. Immunizations are recommended for children with Progeria in the same way they are recommended for the general pediatric population, including flu vaccines. In addition, vaccines that are indicated for children in high risk categories should be given to children with Progeria. When vaccines are in short supply, children with Progeria should be given special consideration, as they may be more frail than their age-matched peers and therefore less capable of handling an illness. Please confer with your child's primary care doctor for more information on specific vaccines.

- •The lungs are not known to function abnormally, but a small chest cavity and tight skin over the chest area may cause restrictive lung problems in some children.
- •The endocrine system functions normally, though pubertal changes such as growth spurt, genital, and adult hair development do not generally occur. Some children are treated with growth hormone, which may increase their overall size. It is not clear whether growth hormone increases overall health in children with Progeria. Evaluation by a qualified endocrinologist is recommended if considering growth hormone treatment.