Considerations regarding Pediatric studies

The informed consent is signed by other than the study participant.

Not particularly controversial but it is the parent or guardian who signs the IC for the child to participate. This means that the IC process has to be much more extensive even to the point of getting the "buy-in" of the study participants pediatrician or the parents family physician. The reason for this is that it is unlikely that a parent would not consult one or both of these physicians. The IC, itself, would need to be written in a 6th grade level language and if the child is older than 7 years, an "assent" form in their language must be part of the process.

• Compensation for the participant and the parent.

Properly handled, this has not proven to be an issue. However, it is possibly a sticky issue as it is conceivable that a parent could encourage a child to go on a study for the money and the child may never gain any benefit other than the study treatment itself. One solution employed is to place the study stipend in an irrevocable trust for the child making the money available only after the age of maturity. Another age appropriate way is to compensate the child in gift certificates for toy stores or toys or games worth what the compensation should be. Another area is parent "compensation" which is for lodging, day care costs, meals, transportation and missed work.

• Normal healthy children in studies (Phase I)

Justification depends on the study but starts with the concepts of "minimal risk", "likely benefit in the life of the child", and "societal benefit". Minimal risk is that risk of usual daily activities, which includes physicals, venapunctures, and urine samples. The risk of a catheter is considered similar to the risk of falling on a playground e.g. This is the area that is often the cited as the reason an IRB will turn down a given study. For this reason, studies of this nature must clearly delineate a rationale for the study in question consistent with good medical practice. Good reference is the American Academy of Pediatrics "Guidelines for the Ethical Conduct of Studies to Evaluate Drugs in Pediatric Populations" in *Pediatrics* 95(2) 286-294, 1995. Copy available.

Studies on children with an illness or disease process (Phase II, III)

To inflict more stress on a child already afflicted with a medical condition would not be considered unless the study held promise of being of clear benefit to the child in question. In this same vein, studies with a placebo arm would have to be very carefully evaluated. Placebo controls would only be used if the course of the disease was erratic and to not use a placebo wing would prolong or nullify the results. Basically, placebo wings are best avoided when possible.

• Invasive procedures in children

Few of us would easily inflict the pain (however minimal) of even venapunctures unless these acts were absolutely essential for a study and even then, not without considerable thought. Thus, if the study had great merit and clear benefit to the child and, as well, to mankind, it would be more readily accepted by parents and the public at large. Usually, in PK studies, an indwelling catheter is used and, of course, the blood volume guidelines are followed. These guidelines are that 3% of the circulating blood volume for all study related blood over 3 – 4 days is acceptable. As the blood volume is 70 to 80 ml per kilogram that means that e.g. for a 20-Kg child, the **total** blood allowed would be 48 ml (3% of 1,600 ml max).

Charles H. Pierce, MD, PhD

Colleagues Consulted for the above position paper:

John T Wilson, MD Department of Pediatrics LSU Medical Center 1501 Kings Highway Shreveport, LA 71130-3932

318 675 5080 - jwilso1@lsumc.edu

Gregory L Kearns, PharmD Chief, Pediatric Clinical Pharmacology Children's Mercy Hospital 2401 Gilham Rd. Kansas City, MO 64108-9898

816 234 3059 - gkearns@cmh.edu