

## CPR FOR PEDIATRICS 2.1 HEMOGLOBIN TARGET

The Hb target is the intended aim of ESA therapy for the individual patient with CKD. In clinical practice, achieved Hb results vary considerably from the Hb target.

- 2.1.1 (FULLY APPLICABLE TO CHILDREN)** In the opinion of the Work Group, selection of the Hb target and selection of the Hb level at which ESA therapy is initiated in the individual pediatric patient should include consideration of potential benefits (including improvement in quality of life, school attendance/performance, and avoidance of transfusion) and potential harms (including the risk of life-threatening adverse events). (Clinical Practice RECOMMENDATION)
- 2.1.2 (FULLY APPLICABLE TO CHILDREN)** In the opinion of the Work Group, in pediatric dialysis and nondialysis patients with CKD receiving ESA therapy, the selected Hb target should generally be in the range of 11.0 to 12.0 g/dL. (Clinical Practice RECOMMENDATION)
- 2.1.3 (APPLICABLE TO CHILDREN, BUT NEEDS MODIFICATION)** In dialysis and nondialysis patients with CKD receiving ESA therapy, the Hb target should not be greater than 13.0 g/dL. (Clinical Practice RECOMMENDATION)

### BACKGROUND

We refer the reader to the prior rationale outlining the Work Group's understanding of the unique factors to be considered in the

selection of the Hb target in the pediatric CKD population (reference 56, page S90). There continues to be a lack of evidence to support the assignment of benefits and harms to any given level of Hb for an individual child. This difficulty is compounded by age and sex variation in Hb values in children and the need to address metabolic, growth, and developmental issues in children that are not part of the adult data sets.

Furthermore, and as previously stated by the Work Group, we affirm the comments made regarding the choice of Hb target; in particular, that it should remain an opinion-based CPR and that any individual patient target should be chosen with consideration made for uniquely pediatric factors, including, but not restricted to, age- and sex-specific Hb distribution, neurocognitive development, school attendance, exercise capacity, and family support.

With respect to adult data regarding the safety of targeting Hb levels greater than 13.0 g/dL; although the Work Group acknowledges similar concerns might exist in children, there are currently no studies to support an increased risk at Hb levels at or greater than 13.0 g/dL in this group. However, given the evidence that is available in relation to increased risk of cardiovascular death and coronary artery calcification in older children/young adults with CKD, it would seem prudent to carefully weigh the individual child's likely benefit of an incremental increase in quality of life, school performance, or exercise tolerance from a Hb level greater than 13.0 g/dL, to their uncertain, but potentially devastating, risk of a myocardial event, stroke, or loss of venous access.