

	Helpful to improve the utility of BIA in pediatrics	Harmful to improve the utility of BIA in pediatrics
Internal origin attributes of the BIA method	STRENGTHS	WEAKNESS
	<ul style="list-style-type: none"> • Low cost • Portable • Ease of use • Non-invasive • No radiation exposure 	<ul style="list-style-type: none"> • Doubly indirect method • Assumptions may be violated by rapid changes in hydration and body shape • Equations must be population-specific and device-specific • Manufacturers may not provide details on how equations have been constructed (e.g., population, reference standard) • Devices may not generate raw BIA outputs • Inability to compare bioimpedance data across devices, especially between those that used different reference methods • Lack of protocol standardization
External origin attributes of environment	OPPORTUNITIES	THREATS
	<ul style="list-style-type: none"> • Solve technical issues • Investigate the validity of longitudinal BIA measurements and the specific BIVA • Examine the predictive ability of phase angle measured at different frequencies • Compute reference data for BIA estimates that are device-specific and population-specific • Establish a standard protocol • Improve reporting of procedures • Develop partnerships between industry and academic researchers 	<ul style="list-style-type: none"> • Conflict of interests • Costs • Standard reference methods are not free of error • Interindividual variability between testing subjects

Figure 3