Recombinant human growth hormone is a classical therapeutic drug for children with short stature. In addition, gonadotropin-releasing hormone analogue (GnRHa) and aromatase inhibitors may delay the bone age in children and may be beneficial in improving final height. Recombinant human insulin-like growth factor (IGF)-1 is the main treatment for primary IGF-1 deficiency, and C-type natriuretic peptide (CNP) offers a therapeutic option for children with short stature due to chondrodysplasia. Growth hormone-releasing peptide analogues stimulate growth hormone release and may be used for growth-promoting therapy. In this article, the research progress of growth-promoting therapies other than growth hormones is reviewed to provide more options for the clinical treatment of children with short statureIn recent years, as the mechanism of growth in children has been further explored, growth-promoting therapies other than growth hormone have made great progress.