There are a variety of bone graft substitutes that are available for use in spine fusion surgery or are being evaluated in various stages of clinical trials. In general, these types of bone graft are a synthetic or a manipulated type of a naturally-occurring product.

There is a lot of interest in developing and refining bone graft substitute options for use in lumbar spinal fusion surgery procedures in order to eliminate the need to harvest the patient's own bone, thus potentially reducing the risk and pain associated with the procedure and resulting in higher fusion rates.

There are several main types of bone graft substitutes used in spinal fusion surgery, which can be generally categorized into three main areas:

Demineralized Bone Matrix (DBM)

Synthetic bone graft extenders

Bone Morphogenetic Proteins (BMP).